

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

(WITH) { STAMPEDSIXPENCE.
(SUPPLEMENT) { UNSTAMPED...FIVEPENCE.

Messrs. BRUNTON and Co. also effect PURCHASES and SALES in BRITISH and FOREIGN FUNDS and RAILWAYS, LIFE and FIRE INSURANCE, CANAL, GAS, STEAM, and other JOINT-STOCK COMPANIES' SHARES, paying regular dividends.

Original Correspondence.

REMOVING THE SEDIMENT FROM STEAM-BOILERS.

SIR.—In a late *Mining Journal* an improvement for removing the sediment from steam-boilers was noticed. It consisted in using a stirrer, passing through a stuffing-box in the end of the boiler. This may be good in its way, but I think that a method adopted in this country is far better—sheets of thin iron are bent to form a segment of a smaller circle than the boiler, and fixed inside, a few inches above the bottom of the same; thus a trough is formed, into which the mud or sediment is thrown by the action of the fire, as the steam is generated on the bottom, and passes between the trough and sides of the boiler: as the water in the centre of the same is in a quiescent state, the sediment deposits in the trough, and is not again disturbed until the boiler is cleaned out. A still greater improvement would be to fix in the middle of the trough a row of tubes of (say) 3 in. diameter, passing through the bottom of the trough, and the upper part reaching to within 6 in. of the surface of the water in the boiler; the effect would be a more complete and rapid circulation, and, consequently, more steam would be generated in a given time; an ascending current would be formed between the trough and sides of the boiler, and a descending one through the tubes, and thus no deposit would form on the bottom of the boiler. Some years ago I constructed a boiler for a colliery engine, in which tubes to cause the circulation of the water were placed; these were examined after some months' work, and reported by the engine-driver to be quite bright inside, caused, I presume, by the rapid circulation of the sediment with the water through them. No trough was in that instance used. JOHN PLAYER, C.E.

Britannia Iron-Works, Rhénish Prussia.

IRON MANUFACTURE—BESSEMER'S PATENT.

SIR.—I have heard and read a good deal about Bessemer's plan of making wrought-iron without the puddling-furnace, and I cannot help expressing my astonishment that the practical man should be led away with the idea that serviceable malleable iron can ever be made on Bessemer's plan. That good finer's metal at a cheap rate may be made by it is very probable, and this Martien's plan will achieve, I imagine, even more cheaply than Bessemer's, but this is not wrought-iron. I have not time to enter into the question, and, therefore, must content myself by saying, that whenever any old dairy woman can hit upon a plan to save churning, and yet make good butter, by merely warming up the cream, and then run out a cast of good fresh butter, I shall have some hope for Bessemer. The Devonshire clotted cream is very nearly butter, but it is not quite that, and never will be without churning; neither will malleable iron, of any service, ever be made on Bessemer's plan without puddling. I. C. HILL.

Willden Works, Abergavenny, Oct. 8.

THE NEW IRON-MAKING PROCESS.

MARTIEN'S SPECIFICATION.

SIR.—In your Journal of Sept. 27 is published a letter from Mr. D. Mushet, on the new mode of treating crude iron invented by Mr. Martien, but claimed by Mr. Bessemer, the said letter containing many grave charges against Mr. Martien's patent-agent, for "cooking" his specification. Now, as my name is intimately associated with Mr. Martien's in these matters, being subscribed as "witness" to Mr. Martien's signature to his complete specification, it may be inferred by those who are not well acquainted with the facts, or who will not know facts, or who knowing them pervert them to some other meaning, that I am the delinquent alluded to. Though I had to do with Mr. Martien's "provisional" specifications, and which, perhaps, might have been more comprehensive, yet when the time came to file the complete specifications, seeing the immense importance of the invention, and the necessity of careful compilation, I hesitated to incur so great a responsibility, and advised Mr. Martien to take another agent into our councils, under the fullest confidence that we should have the benefit of his practical and technical experience, and with the fullest reliance on his professional integrity, not knowing, of course, that he was at that time engaged in securing a patent of a subsequent date for the same invention for Mr. Bessemer. Under the circumstances, I think it would have been more honourable for him to have refused his services than to take his fees and not give his services faithfully; he must have known he could not do justice to both. He would then have maintained his apparently honourable position; now he must bear with the consequences of his policy.

I feel that I have reason to complain of his conduct towards both my client and myself. It is not always that one member of a profession will send business to another member, but when it does occur, it should be met by increased solicitude on the part of the latter to render professional assistance. JOHN AVERY.

32, Essex-street, Strand, Oct. 8.

TRURAN'S "IRON MANUFACTURE OF GREAT BRITAIN."

SIR.—A few words in reference to Mr. Mushet's remarkable letter in your last Journal. For lack of better arguments he resorts to abuse, and even proceeds to the length of abusing my work on the "Iron Manufacture of Great Britain." A few days after this book was published, he wrote his opinion of it in the *Mechanics' Magazine*, from which I will make a short extract:—"Mr. Truran is a practical man, and has lately published, at Spence's, a very useful work on iron making. It does not pretend to compete with the great French works of the same character; and I notice some antiquated matter, both in the plates and the letter-press; but as a whole it presents good information in a moderate compass. The sections of blast-furnaces are an excellent feature." Now, when it is borne in mind that Mr. Mushet edited a work on iron and steel, in the sale of which he had a direct interest, a more flattering encomium could hardly be expected from him. Placing this extract in juxtaposition with his abuse of last week, the reader can form a tolerable idea of the reliance to be placed on his statements. His statement that I published the book shows that with him publisher and author are synonymous. Having a knowledge of all his writings for these many years past, I failed to attach that importance to his good opinion which he expected I should—hence the subsequent abuse so liberally bestowed on me whenever occasion has offered. MARSH, Sept. 29.

BLASTING ROCK BY ELECTRICITY.

SIR.—Technological difficulties and mysterious circumstances therein require precision of detail and accuracy of description, orally as well as graphically. It is impossible to understand "Quarrryman's" description of the anomaly said to have occurred in blasting rock by electricity, and therefore impossible either to explain the difficulty or understand the occasion of a new fact. He bores 44 holes, and fills each of them with 20 lbs. of powder; and as he mentions the hole nearest to the battery as No. 11, and the one furthest from it as No. 44, and describes two intermediate holes as not having exploded, without mention of any other holes, we conclude that there were only 14 holes connected in circuit.

Will I favour me with a more precise description? Thus:—Was No. 1 hole connected with one battery terminal, and No. 44 with the other terminal, and which (that is, copper or zinc) was No. 1 hole? Also, were the holes Nos. 2 to 43 connected together, and these with Nos. 1 and 44? Also, he describes but one main wire; surely, there were two main wires! Also, what was the situation of the battery with respect to Nos. 1 and 44?—Oct. 6.

W. RADLEY.

QUARTZ CRUSHING MACHINES.

SIR.—Absence from home prevented my perusal of Dr. Collyer's letter in your Journal of Sept. 27, or I should have noticed it before, as I am clearly entitled to do, notwithstanding my final letter on this topic. To be truthful and correct in my reply, I would the Patent Office to-day, and found to my surprise that the wanted patent of the doctor is no patent at all, having proceeded no further than the six months' provisional protection, from April 21, 1854. But his letter is a tissue of misrepresentations. He says, I do not remember one of the half dozen persons who were present at the digger's description of the machinery seen, although my letter expressly declared that what I last asserted was at the suggestion of one of those persons.

Remember, Sir, that there are scores in number, to my knowledge, of persons deeply interested in this question, who are paying strict regard to all you publish in your Journal, and who will remember any misrepresentations at some future day. Your correspondent says, "My patent exists is not a roller machine, nor does it roll or revolve." Now, Sir, unless there is another patent, this assertion is evidently incorrect, to prove which take the text of his specification:—"This improved machinery, for crushing or triturating substances, consists principally of one or more heavy rollers, cylinders, or segments of cylinders, made to vibrate or oscillate in a concave bed, which motion, partly rolling, is communicated to the rollers, &c., by arms actuated by a crank, or otherwise." Here is the very description of the digger:—"A garden roller, swung on an axle, so as to be made to roll to and fro, in a hollowed bed." What can he mean by this misstating the fact? If this does not entitle him to the appellation of Munchausen II., I do not know what does; but, *certainly*, I shall not arrive in Australia a wild liar.

Finally, he tells us that he has "avoided all puffery of his invention." Indeed! The styling an invention patented when it is not so, and advertising machines to crush, ready for amalgamation, 10 tons of quartz rock per diem, by the service of a 3-horse power engine, is not puffery, is it? If not puffery, it is wilful deception. Oct. 6.

W. RADLEY.

FORT BOWEN MINE.

SIR.—The dissolution of this company was an event for which every one must have been prepared. How was it possible, when since last Feb. about 4000, has been expended, and since the stamps have been at work, in Oct. 1855, that only 1344, 12s. worth of gold has been extracted, that such a state of things could endure? I have especially told the directors that the amount of gold lost, if only 4 tons of ore had been operated on daily since the machinery commenced working, and all the gold extracted, it would have given no less a sum than 14,000*l.* Under this division, the directors sent out Mr. John Paul, in July last, in whom I had the greatest possible confidence. He was an intelligent person, particularly in relation to the subject of gold extraction. So fully impressed was I that under his management the mine would be re-activated, that I bought, and advised my friends to buy, shares. But what was my surprise, on receiving a letter from Mr. Tournier, by last West India Mail, to learn that Mr. Paul was brought to Colon, on the day of the steamer's leaving, a corpse. It seems that poor Paul, on arrival out in August, was drained to the shameful, outrageous, I may add barbarous, ordeal of going to Esmeraldas, a distance of 75 miles on the ocean, in a cockle of a craft—namely, an open Indian canoe. He was exposed five nights and days to a drenching rain. If your readers will refer to the Journal of Dec. 8 last, they will find my description of how I was subjected to the same inhuman treatment. I, however, was only out one night and day, but from the rigid condition of my limbs, from being

cramped up, even for that period, I cannot feel astonished that John Paul should have been sacrificed!

What makes the matter more afflicting is, that he was deprived of medical aid! No medical man went out since last spring no less than three have died with cholera, and even Europeans are not safe from the pestilential influence of the climate. I am told that it is the intention of having a native medical man; that would be a miserable apology; for if we are to die by disease and a pestilential climate, do not, I implore you, add quackery to our other ills.

Sir, I had the pleasure of Mr. Paul's acquaintance, and never in the course of my life had I met one who really was more worthy of respect and admiration for the possession of talent, combined with a generous and noble disposition. I hope in future, should the Fort Bowen Company be again carried on under new auspices, that one of the first and most prominent measures will be the appointment of a competent medical man, otherwise I would not advise any one, having respect for his health or life, to visit these mines. Secondly, to adopt a means of communication between Colon and the mines, which will afford some protection to the unacclimated European. For this purpose I had an iron-boat, of 35 feet long by 8 ft. wide, built, which I presume has arrived by this date. ROBERT H. COLLYER, M.D.

3, Park-road, Regent's park, Oct. 8.

THE COPPER TRADE.

SIR.—If regarded in its true light, "The Smelter" is really the most insignificant unit in the copper trade of the kingdom; he possesses neither the merit nor daring of the miner, the producing agent, and from whose energies the entire trade has its origin, nor can he lay any claim to the patient industry and consistency of the consumer or manufacturing class, who perfect the labour of the producer, for the purposes of general use; he forms, then, but a slender connecting link in the circle, and lends his capital to the miner at short dates, and affords the manufacturer the rude material for his labour, in which character he is at the most but a middle man—a useful personage so long as his profits conform to the general level of trade; but when, by a combination, he raises those profits to an inordinate height, he becomes the reverse; it behoves the parties most interested, the miners and manufacturers, to bestir themselves and secure their position by union. A reflecting mind must at once see that the power of resistance which has been ascribed, under these circumstances, to the smelter is a mere bugbear, and must yield to a united effort of either the producing or consuming classes, it is immaterial which. It is not a question of "who shall bell the cat?" nor does it present the proverbial danger of taking the bull by his horns; for the mere act of union by either interest would paralyse the smelting interest, who possess no inherent power in the trade beyond what is permitted them. It is the reverse of what is true of all such social arrangements, to ascribe to them more power than a permanent and some little of the great capital and great energy employed in mining affairs would ever now have been set aside by mine proprietors, to get themselves out of a position so unenviable.

The great want of unanimity shown, the display of what is intended to be done, the puffing up of the numerous pot schemes which are thrown on the carpet by dreamers, and by means of which copper is to be extracted from its ores at less than no cost, and present smelters cut entirely out of the market, are, in truth, enough to make the public believe that no grievance exists, and that this evil is got up either by the miners, as a means of giving all they can get of the smelters, or by designing persons, having no connection at all with mining affairs.

The manipulation of copper ores has, as is well known, notwithstanding numerous never-worn patents, been for many years past almost in a standing state—the few improvements which have been made having had for their object the saving of costs. That the present process may not be found cumbersome and faulty to a degree by the next generation, or perhaps sooner, I am not ready to deny, but I do believe that no scheme yet tried, or in the list of those given in your Journal to date, has any chance of being more successful than the one now practised here.

If, therefore, miners really wish to extract their own copper, and do away with the middle men between them and the consumers, they should waste neither time nor money upon new, untried methods, but at once start a works upon the old plan, and be content with the more than fair profits which they would surely be able to get out of the present enormous margin of the old smelters. Having established the works at an outlay which would be returned them with interest in a few years, they could well afford to wait, without any more of the present useless grumbling, till some of the excellent plans now in embryo are brought to perfection. CORNISH.

Swansea, Oct. 6.

EAST BOSCEAN MINE, AND ITS MANAGEMENT.

SIR.—Your Journal being the medium through which mining matters are discussed, I would beg to enquire, through its columns, the reason why the adventurers are kept so long in a state of ignorance respecting what is doing, and why the pursuer has not called a meeting, to determine the course to be taken respecting the relinquishment of a great number of shares sent in in May last? Also, I would beg to enquire what authority has been given the pursuer or manager for stopping the engine and drawing the materials to surface? Surely, this latter is a liberty no pursuer is warranted to take, with even the smallest shareholder, without a meeting, and leading to the ruin of the mine. The speculation is considered a good one, if conducted with energy, but it is rumored that it has been worked differently. It is high time for the shareholders to look well to their own interest, or they may find themselves liable to a greater extent than they may imagine. There has been but one meeting held since March or April, 1855.—Redruth, Oct. 8.

N. S.

MEETING OF SOUTH STAFFORDSHIRE MINE AGENTS.

SIR.—In your last week's Journal, some anonymous scribbler has thought fit to string together a tissue of falsehoods respecting the late inquiry at Oldbury. Now, those kinds of attacks on a public officer, I consider unworthy of an answer; but charges made by a man of any mark in his own district I should think worthy of notice.—Stone, Oct. 8.

T. WYNN.

AN ARTFUL DODGE.

SIR.—A few months since a call of 6d. per share was made at a general meeting of a mine situated in the north of Devon, not 30 miles from Molland; and, in consequence of the non-payment of the said call, upwards of 1200 shares were forfeited, and eventually sold to the only bidder at 6d., the amount of call. The buyer fearing that the shares were likely to lay on his hands, and seeing another call approaching, commenced scheming, and obtaining the co-operation of a person remarkable for his rotundity, and a clerk to a descendant of the supposed lost tribe of Israel—obtained the names of such shareholders, especially those who have been for a long time but too anxious to sell their shares, wrote them stating that they are buyers of any number of shares; and, at the same time, stating that probably 2s. to 2s. 6d. could be given. Now, Sir, I am positively assured that some of the shareholders were weak enough to suppose that they were going to get the above price for their interest; but the reply has been—"If you will leave the shares in my hands I will endeavour to sell them for you." In the meantime the schemer has been slipping his sixpenny stock, whilst the largest holders have refrained from selling, in consequence of the letters addressed them, hoping to see better prices.

In addressing you upon this matter, it is chiefly to caution distant shareholders that they do not purchase the shares at the quantity given was only an artful dodge, to keep up a negotiation whilst the schemer and his agents were selling the shares at prices under those submitted as likely to be obtained. In fact, no bona fide transaction has taken place above 1s., unless it has been by some unfortunate dupe, lulled by false representations.

There is no improvement in the mine to warrant a rise, nor can any advance take place in the shares until some important discovery is made; and that is very improbable, without a considerable outlay for new machinery, the present being inadequate for more progress in operations, not to mention the cost of about 2s. 6d. per share may deprive the lender a little more, and bring the mine into a profitable position. It is not the mine I condemn, but the dishonourable measures adopted to get rid of a responsibility voluntarily taken upon themselves. It is far better for each to return to their original position, than add to the disrepute of the mining share market. Oct. 9.

A SHAREHOLDER.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.

SIR.—I know not by what means your eccentric correspondent, Mr. Coombe, has dubbed me a director. You know perfectly well that I am not one, and therefore I shall simply state to my brother shareholders that his asseveration is neither more nor less than an untruth. I am not ambitious of being a director, but I believe, had I endeavoured to put myself forward, considering the large stake I hold, I might have had some chance of obtaining a seat at the board. I have a very vivid recollection that at the last annual meeting Mr. Coombe offered his services as a director, but the shareholders did not appreciate his merits so well as he did himself, and some technical difficulties being in the way, Mr. Coombe did not obtain the directorship he so ardently aspired to. As he is fond of quotations from the dead languages, I give him one, "*hinc ille lacrymæ*." The plain English of this is, that as he could not obtain a seat at the board he was determined to annoy all those who had that confidence of the shareholders which, with all his speciousness and jealousy, he could not attain. I am, however, anxious to preserve my property, and should not obtrude upon your space with an extraordinary flourish of rhetoric. I think it necessary. How can it be reconciled with common sense, when it appears he distrusts those men whom only a short time since he had such great confidence in. I dislike entering into any personalities, but Mr. Coombe has thrown down the gauntlet, and before he enters the lists for the tourney, whether it be for amusement or a *Poutrance*, it would be as well to look to his capabilities, as well as his antecedents. In his own imagination, he may be a *preux chevalier*, like Bayard, but I think the simile of Don Quixote make some enquiry, but I do not find him possessing either of the qualifications he so much dilates upon—that is, being a sound lawyer and a man of business. Neither of these qualifications do I arrogate to myself, but I think I may assume that I possess a little of that ingredient called common sense, and I think that I and my brother shareholders would be very verdant if we entrusted the charge of our affairs to the Gravedigger, who has been out of practice some three years, convinced, as I am, that from that lively locality he would merely come to town to inter us. At the time the proposal was made by Mr. Drummond that the present arrangements should take place, Mr. Coombe seconded the motion, and now, forsooth, he begins to cavil, when he knew it was in his power, had he felt so disposed, to have moved an amendment. As far as regards his attacks against myself, I care not. I should not trespass on your space, did I not think it necessary that the general public should be guarded against the jaundiced views of an angry, envious, disappointed man. According to Mr. Coombe's own showing, he has received some 3000*l.* from the company, and he complains that, if dissatisfied, the directors should have had his bill taxed. In this particular I cannot exculpate them, and I have no doubt, had that bill undergone the ordeal of the taxing master, it would have been considerably moderated.

Mr. Coombe has stated he wishes dissatisfied shareholders to communicate with him prior to a public meeting being held. He knows perfectly well that he is merely agitating for a purpose which will never be achieved. In the event of the new company not being formed, I understand, from high legal authority, that a contribution of 5s. per share would be required from those who could pay, and perhaps a trifle

more for defaulters who could not answer their liabilities. Mr. Coombe tells us not to be frightened, there will be nothing to pay. Decidedly not, from those who are not worth suing, and cannot pay; but those who have a large stake in the concern must dub up for the defaulters. I have no wish to enter into any further controversy; suffice it to say that we have expended over 60,000*l.*, and have machinery and a good plant. The capabilities and superintendence of Sir Henry Stanley are not fitting topics for this letter; they have been previously discussed at the several general meetings. If Mr. Coombe can devise a better plan than the one which he seconded at the public meeting, why did he not come forward with it there? There were shareholders from Leeds, Wakefield, Lincoln, Leicester, and other places, yet my own property, but let the shareholders themselves judge between the loud and straightforward statement of the directors and the wild reveries of Mr. W. A. Coombe. Army and Navy Club, Oct. 9.

A HOLDER OF 2000 SHARES.

Meetings of Mining Companies.

TAMAR SILVER-LEAD MINING COMPANY.

A meeting of shareholders was held at the offices of the company, Gresham-street, on Monday, Mr. J. W. DUNSTON in the chair. Mr. GEORGE (the secretary) read the notice convening the meeting and the minutes of the last, which were confirmed.

A statement of accounts was exhibited, from which the subjoined is condensed:—Account for four months, ending with cost for August: Balance last account £ 916 11 0 Ores sold, June 21 to Sept. 30 2526 3 11 Sale of materials 441 10 3 = £3987 5 2 Mine cost, May to Aug., both inclusive £3371 11 4 Discount 14 4 6 Directors' attendances, half-yearly, to Aug. 31 50 0 0 = 3435 12 10

Balance in favour of company, after paying all liabilities £ 551 9 4 The CHAIRMAN said he had to apologise for the absence of Mr. Hadow, who was prevented presiding over the meeting through unavoidable absence with his family, and to beg the shareholders to accept him as his unworthy substitute. He was sorry they had no better account to give them, but, through the diminution of the ore in the 190, and the bad price obtained for what had been sold, a serious loss had been incurred during the last four months. As under the present constitution they had no register of shareholders, and the directors alone were liable for any debts that might be incurred, their present state would seem to involve the necessity of a call, which the directors would have made but for the fact that they were still without a lease, and uncertain, therefore, about the continued existence of the company. Their position with the Duchy was this—the directors had applied for a renewal of the lease, but their application had not been favourably received, and a lease for 18 months only, from Ladyday last, had been offered to them. The directors had respectfully solicited the Council to reconsider their decision, and on Mr. Gardner's return from Cornwall, they hoped for a satisfactory arrangement, and they should presently ask the Council to adjourn for a month, to enable them to report progress. At the adjourned meeting, they might also, if necessary, consider their position under the new Joint-Stock Companies Act. The third point to which he would call their attention was the resignation of Mr. G. B. Carr, who considered the present a favourable opportunity for leaving the board. [The Chairman then read a letter from Mr. G. B. Carr, resigning his appointment, and declining to have his name in any new lease.] The Chairman continued.—They were aware that, under the present constitution of the company the election of a director must rest with the board, but, in pursuance of the pledge given on a former occasion, they had not filled up the vacancy, but had waited for the present meeting to meet some one for election. The directors' feelings would have induced them to request Mr. Mackay to take Mr. Carr's seat. He was a gentleman who had given a great deal of attention to the mine, and was a large holder of shares, and if it should be the wish of the shareholders, the board would be happy to elect him. He would now refer them to Mr. Wolferstan for his report, after hearing which, and receiving every explanation they might desire, he should ask them to pass the accounts and report, to recommend a director to the board for election, and to adjourn for a month.

Mr. HEDDERLEY said that he should like to see the accounts more detailed, and the charges for working the mines separated from those in London.

The CHAIRMAN said they were fully detailed in the cost-sheet, and the expenses in London, independent of the allowance to directors, were only 5*l.* per month.

Mr. WOLFERSTAN said he was sorry he could not meet them with the same satisfactory statement as on a former occasion, but still their prospects were better than at the last quarterly meeting. He would read a report he had drawn up with the greatest care, and would be ready to answer any questions. Mr. Wolferstan then read a report on the operations that had been carried on during the last three months, together with some observations on the present state and prospects of the mine. The 215 fathoms level had been driven 8 fms. on the course of the lode; the driving had for the whole distance laid open good and very profitable ground, and the lode when taken down (Sept. 30) proved to be better than it was previously, being now worth 16*wt.* of ore per fm. There are two stopes in the back of this level, with six men in each, and the lode on an average is worth 14*wt.* per fm. The 205 has been driven 7 fms. 2 ft. 6 in. towards the shoot of ore gone down in the 190. Jackman's winze had been sunk from the 190 down to the 205, and they are now driving back to meet the coming end. The distance between the ends is 5 fms., and it is expected to hole in this month. The level will then be vented, and it will take but a short time afterwards to reach the next shoot of ore, and which at the 190 is 150 fms. long, and all but untouched in the bottom. Morcom's winze, in bottom of the 205, has been sunk 4 fms. 3 ft., but has been suspended for the last month, as the water was too quick; this winze is about 20 fms. before the 215 end, and the lode in it is 2½ ft. wide, and worth 10 *wt.* per fm. There is one stope in the back of this level, yielding 7 *wt.* per fm. The 190 has been driven 20 fms. 6 in.; for this distance the lode on an average turned out 9 *wt.* of ore per fathom, but in the present end it is not worth more than 6 *wt.* There are three stopes in the back of this level, worth respectively 11, 9, and 7 *wt.* per fm. In the 175 they are not driving, but have one stoper working in the back worth 7 *wt.* per fm. In the 165, two stopes, each worth 6 *wt.* per fm. The mine is much improved, the lode in the 215 being now worth 16 *wt.* of ore per fathom in the end, and in Morcom's winze, which is 20 fms. before the end, is worth 10 *wt.* per fm., so that it may be fairly calculated on having a good profit on this length. The distance driven during the last three months has been about double the quantity of ground that had been taken away. The 205 will shortly be into the rich shoot of ore gone down in the bottom of the 190, and then it may be fairly expected to increase the returns, and again place the mine in a profitable condition. The whole of the machinery is now in good order, with the exception of the condensing work of the pumping engine; however, all the new work is ready to put in when required. There had been no accident of any kind during the past quarter. Mr. HEDDERLEY wished to know whether the mine was richer or poorer at the present time than at the last meeting?

Mr. WOLFERSTAN said they had now a better lode in the 215 than at any other period. He then fully explained, by a plan, the present working of the mines. They had been profitable, and he believed they might be so again.

After a lengthy discussion, during which the Chairman stated that the directors were quite ready to redeem their pledge of vacating their seats in favour of any other shareholders, if a change was thought desirable, the report and accounts were unanimously adopted. Mr. Mackay recommended for election as a director, and the adjourned to the 17th inst., when he would be ready to receive a vote of thanks to the Chairman terminated the proceedings.

CLARENDON CONSOLIDATED MINING CO. OF JAMAICA.

A special general meeting of proprietors was held at the London Tavern, on Monday, for the purpose of adopting a resolution authorising the registration of the company as a company with limited liability, under the Act of Parliament passed in the last session, known as the New Joint-Stock Companies Act, 1856.

Mr. J. W. CATER in the chair.

The CHAIRMAN, after waiting some time, said he was sorry to detain the meeting, but under the present deed of settlement it required twenty shareholders to be in attendance, which was unanimously adopted. He was afraid they would be compelled to adjourn the proceedings, but trusted proprietors would attend upon the next occasion, otherwise they would lose the benefit of being a limited company.

A PROPRIETOR wished to know whether proxies could not be used. Mr. FRESHFIELD (the solicitor) replied in the negative. Under the deed it was absolutely necessary that twenty shareholders should be in attendance.

The CHAIRMAN said the adjourned meeting should be called with the least possible delay. They were compelled to give ten days' notice, and he would fix Friday, the 17th inst., when he trusted the proprietors would see that it was to their interest that they should attend.—The meeting was then adjourned.

DUSTON IRON ORE COMPANY.

A special general meeting of the proprietors was held at the offices of the company, Cannon-street, on Wednesday, Mr. BROWN in the chair.

Mr. NUNN (the secretary) read the notice convening the meeting, which was for the purpose of bringing the company under the Joint-Stock Companies Act, 1856.

The CHAIRMAN said he considered it unnecessary to say one word, beyond the fact that the board thought it would be for the benefit of the shareholders generally to place the company under the New Joint-Stock Companies Act, 1856, notwithstanding that it was stated in the prospectus that the liability was limited to the extent of 1*l.* per share, of which 7*l.* 6*d.* still remained to be called up. Although there was no other business before the meeting when the resolution was disposed of, he should be happy to answer any questions. The following was the resolution intended to be submitted:—"That this company, completely registered under the Act 7th and 8th Viet., c. 119, be registered as a limited company under the Joint-Stock Companies Act, 1856, by the name of the Duston Iron Ore Company (limited), and that the solicitor of the company be authorised forthwith to take the necessary steps for that purpose." A PROPRIETOR wished to know whether it limited the liability as to debts now in existence?—Mr. RIVOLTA said it did not affect any liabilities.

The CHAIRMAN was happy to inform them that at the present time they were in the fortunate position of being out of debt.

A PROPRIETOR was of opinion that, under any circumstances, they ought to bring the company under the provisions of the new Act. Mr. COOPER moved, and Mr. HALEY seconded, the resolution read by the Chairman, which was unanimously adopted. The CHAIRMAN said, with reference to the position of the company, although it might be said they were two years doing nothing, they had really done a great deal, because the directors had got the company out of debt, and were determined not to get the shareholders again into that difficulty, unless they could see their way clear for the benefit of all. The board had been as careful as possible, both in the making of bricks and sale of the ore; of the latter a great many hundreds of tons had been sold, and a much larger quantity might have been disposed of, but, upon making calculations, the price at present offered by the ironmasters did not leave an adequate profit. However, the important fact was established that the ore had been approved of in many quarters, and others were only unfavourable because they could not get it at their own price. The directors had received offers to erect furnaces from highly respectable parties, at reasonable prices, and at convenient times of payment; but when they heard of the extraordinary alterations likely to take place in the manufacture of iron, either by Bessemer's or Martien's process—for it was immaterial to the company to whom it belonged—the directors were of opinion it was better to wait

the result before erecting the furnace, as in the event of the patent being carried out the ore could be made into iron instead of pig. With regard to the bricks, they had made a profit of between 300l. or 400l., which would go towards the payment of some expenses. They had succeeded in letting all the trucks they did not require at a small loss, which, as the company were compelled to pay a heavy rent, would be a great saving to them; in fact, if the trucks had belonged to them they could sell the ore at a good profit.

Mr. COOPER wished to know whether they were selling any ore at the present time? The CHAIRMAN replied that they had contracts at the present time for about 300 tons; but, as he had before stated, he did not consider they were getting such a profit as they were entitled to. He was of opinion that if they continued to sell the ore they might get it removed upon more favourable terms.

A PROPOSER wished to know whether they intended to puddle the iron? The CHAIRMAN said the board never contemplated erecting puddling furnaces, as they only intended making it into pig, but if Bessemer's, or Martin's, process succeeded they would be enabled to make it at once into iron, which would yield to the company a very large profit.—After a short discussion the proceedings terminated with a vote of thanks to the Chairman.

REVIEW OF THE PROGRESS OF BRITISH MINING IN THE QUARTER ENDING SEPTEMBER 30, 1856;

WITH A FEW PARTICULARS OF SOME OF THE PRINCIPAL DIVIDEND AND PROGRESSIVE MINES.

BY J. H. MURCHISON, ESQ., F.R.S., F.G.S.

Author of *British Mines considered as a Means of Investment, &c.*

The mining interest has still to be congratulated on its satisfactory position. Three months ago, the continued fall in the price of copper ore produced considerable discouragement, but the anticipation held out in last Review, to the effect that it was not probable the standard would be lowered much more, has been realised, and we find a reaction took place soon after the commencement of the past quarter, which has been maintained to the present time.

The average produce of the copper ores sold in Cornwall in the first week of July was 7½, the price per ton 5l. 19s. 6d., and in the last week of Sept. the produce was also 7½, but the price per ton was 6l. 12s., being a rise of 12s. 6d. per ton, and which would make a difference of about 35,000l. on the 49,636 tons of ore sold in Cornwall during the quarter. In the first week of January last, the average produce of 7½ realised 7l. 2s. 6d. per ton, making a fall in the first six months of the year of 1l. 3s. per ton, 12s. 6d. of which it has been seen has been since recovered, while the remaining 10s. 6d. per ton is in a great measure made up by the lower prices of materials used in mines. Taking the dividends paid by English mines in the past nine months as a criterion of prosperity, it will be found that the amount is larger by 27,000l. than the whole amount divided in the year 1855; and assuming that the remaining three months of this year show equally satisfactory results, there will be an increase in the year 1856 over 1855 of nearly 45,000l., while the amount paid in that year was higher than in any previous one.

The following are the particulars of sales of copper ores in Cornwall, in the quarters ending Sept. 30, June 30, and March 31, and for the corresponding periods of 1855:—

Quarters ending	Tons.	Average produce.	Amount.	Average price per ton.	Fine cop. Tons cwts.
Sept. 30, 1856.	49,636	6.974	£299,273 16 0	£5 0 7	3455 18
June 30, " "	54,273	6.311	308,653 18 0	5 13 8	3427 13
Mar. 31, " "	53,994	6.202	317,327 17 6	5 17 8	3358 9
Sept. 30, 1855.	49,106	6.572	322,932 18 0	6 15 7	3273 17
June 30, " "	48,245	6.522	318,966 10 6	6 12 2	3155 4
Mar. 31, " "	45,949	6.379	287,093 3 0	6 5 2	2933 11

It appears, therefore, that in the past quarter the quantity of ore has decreased 4637 tons under the preceding quarter, and increased 530 tons over the corresponding quarter of 1855; the average produce has increased 665 over the preceding quarter, and 404 over 1855; the amount realised has decreased 9360l. 2s. under the preceding quarter, and 33,659l. 2s. under 1855; the average price per ton has increased 6s. 11d. over the preceding quarter, and decreased 15s. under 1855; and the quantity of fine copper has increased 28 tons 5 cwt. over the preceding quarter, and 252 tons 1 cwt. over 1855.

The following are the totals and averages of the first nine months of 1856, and 1855, respectively:—

First nine months of	Tons.	Average produce.	Amount.	Average price per ton.	Fine cop. Tons cwts.
1856.	157,843	6.433	£925,235 11 6	£5 17 2	10,242 0
1855.	143,200	6.493	938,994 11 6	6 11 1	9,292 12
Increase in 1856	14,643	—	—	—	949 8
Decrease in 1856	—	—	13,759 0 0	0 13 11	—

The following are the sales of British and Irish copper ores, at Swansea, during the same periods:—

First nine months of	Irish.	Tons.	Amount.	Average price per ton.	Fine cop. Tons cwts.
1856.	157,843	6.433	£925,235 11 6	£5 17 2	10,242 0
1855.	143,200	6.493	938,994 11 6	6 11 1	9,292 12

The demand for copper is good; among others the East India Company have been, and are, large purchasers. The copper mines are, consequently, doing well, and with the exception of Wheal Buller, the shares of the principal dividend mines have remained steady during the quarter; while some of the progressive mines have risen greatly in price, such as Great Alfred, from 2l. 10s. to 16l., and now 11l. per 5120th; Great South Tolgus, from 8l. to 12l. per 6000th; and Grenville, from 1l. to 3l. per 6000th.

Tin remains at a high price, and has lately improved. The mines of that metal are, therefore, doing better than usual. Porkella United, Trumpet Consols, and Wendron Consols, are in a promising position, and if the price of tin be kept up, they are likely to become profitable mines in a comparatively short time. Carnarvon also appears likely to improve as soon as the new machinery is completed; while the operations now being actively carried out at Trevenen and Tremerech United are regarded with interest, and by practical men are looked upon favourably.

The price of lead has been low for some time, but a reaction may be expected before long. The East India Company are in the market for 900 tons, and the general requirements of trade will likely create an increased demand. In the first nine months of this year 24 lead mines have divided 73,381l., and the shares of most of them have either kept steady, or have risen in price. The unfortunate accident at South Tamar will diminish the supply by about 100 tons of ore per month. Cardiganshire has been as famous for her rich lead mines as Cornwall is for her copper mines, and in the past nine months the lead mines of that county have divided 10,810l.; and as several other mines in that rich district are being carried out vigorously, with very excellent prospects, there is a probability of this amount being a good deal increased in the next 12 or 18 months.

Mining has been generally looked upon with disfavour and much suspicion by persons who could scarcely give any specific reasons for coming to such an opinion, but who were led away by some vague ideas, founded, perhaps, on some isolated abuses to which all pursuits are more or less subject, but which they affected to believe were but samples of the whole mining interest. The extraordinary disclosures in the commercial and the banking world which have come to light in the last two or three years, and which have been calculated to depreciate the national character, ought to dissipate such a mode of indiscriminate judgment. Taking the more recent instance, of the failure of the Royal British Bank, it may be said that that one, of other similar cases, has produced more mischief—has caused more misery and ruin, than British mining has done for 20 years. And yet, no doubt, and justly, British merchants and English bankers will retain, as a body, their former high and honourable position in the eyes of the public. But why should opposite principles be followed in the two cases? Many of the failures in mining arise entirely from the want of capital, as is frequently proved by the success of the second or third company, and which would have attended the efforts of the first, had they applied the necessary funds, and worked with proper spirit. And it must be remembered that these continual abandonments and re-workings are in themselves very expensive; for, in the first place, great losses attend the dismantling of mines, and the sale of machinery and materials; while, in the second place, these have to be replaced at a high cost.

There are, no doubt, excellent investments to be made at present, both in dividend and progressive mines, particularly in the latter, where dividends are likely to be paid in a comparatively short time, and the market value of the shares of which are also likely to rise considerably. In purchasing into dividend mines, it is not generally those which are at present paying the highest dividends which are the safest to buy, for the price is high in proportion, and the chances of a fall, and consequent loss, are the

DIVIDENDS PAID BY BRITISH AND IRISH MINES

In the quarters ending September 30, June 30, and March 31, 1856, showing also the total amounts paid in the first nine months of the year.

Number of Shares.	Name of Mine.	Dividends paid in three months ending Sept. 30, 1856.		Dividends paid in three months ending June 30, 1856.		Dividends paid in three months ending March 31, 1856.		Total Dividends paid in nine months ending Sept. 30, 1856.	
		Per Share.	Amount.	Per Share.	Amount.	Per Share.	Amount.	Per Share.	Amount.
5120	Alfred Consols	£0 6 0	£1536 0 0	£0 11 0	£2816 0 0	£0 5 0	£1280 0 0	£1 12 0	£5632 0 0
4000	Bedford United	0 2 0	400 0 0	0 3 0	600 0 0	0 3 0	1000 0 0	0 10 0	2000 0 0
200	Botalack	5 0 0	1000 0 0	10 0 0	2000 0 0	5 0 0	1000 0 0	20 0 0	4000 0 0
6000	Bwlch Consols	0 2 6	750 0 0	—	—	—	—	0 2 6	750 0 0
240	Boscan	3 0 0	720 0 0	3 0 0	720 0 0	3 0 0	720 0 0	9 0 0	2160 0 0
100	Brightside	—	—	3 0 0	300 0 0	3 0 0	300 0 0	6 0 0	600 0 0
1000	Brynford Hall	5 0 0	500 0 0	5 0 0	500 0 0	3 0 0	300 0 0	13 0 0	1300 0 0
2048	Carnarvon	0 5 0	250 0 0	—	—	—	—	0 5 0	250 0 0
256	Condurow	2 0 0	512 0 0	—	—	6 0 0	1336 0 0	8 0 0	2048 0 0
128	Cwmystwith	5 0 0	640 0 0	10 0 0	1280 0 0	5 0 0	640 0 0	20 0 0	2560 0 0
1400	Derwent	2 0 0	2800 0 0	—	—	—	—	2 0 0	2800 0 0
1024	Devon Great Consols	19 0 0	19456 0 0	9 0 0	9216 0 0	18 0 0	18432 0 0	46 0 0	47104 0 0
179	Ding Dong	5 0 0	895 0 0	8 10 0	1521 0 0	4 0 0	716 0 0	17 10 0	3132 0 0
6432	Ding Dong	2 10 0	1660 0 0	3 0 0	2016 0 0	3 10 0	2352 0 0	9 0 0	6048 0 0
13600	Drake Wells	0 2 6	1600 0 0	—	—	—	—	0 2 6	1600 0 0
5700	Edinburgh and Adams	0 3 0	855 0 0	0 6 0	1710 0 0	0 3 0	855 0 0	0 12 0	3420 0 0
1400	Eyan	0 10 0	700 0 0	1 0 0	1400 0 0	0 10 0	700 0 0	2 0 0	2800 0 0
300	East Daren	5 0 0	1500 0 0	2 0 0	600 0 0	—	—	7 0 0	2100 0 0
128	East Pool	5 0 0	640 0 0	5 0 0	640 0 0	2 10 0	320 0 0	12 10 0	1600 0 0
491	Fowey Consols	—	—	—	—	3 0 0	1482 0 0	3 0 0	1482 0 0
2560	Foxdale	1 0 0	2560 0 0	2 0 0	5120 0 0	1 0 0	2560 0 0	4 0 0	10240 0 0
119	Great Work	10 0 0	1190 0 0	15 0 0	1785 0 0	—	—	25 0 0	2975 0 0
6000	Heston Down	—	—	0 6 0	1050 0 0	0 6 0	1800 0 0	1 0 0	320 0 0
2000	Holyford	0 5 0	500 0 0	0 5 0	500 0 0	—	—	0 10 0	1000 0 0
160	Levant	2 0 0	320 0 0	2 0 0	320 0 0	2 0 0	320 0 0	6 0 0	960 0 0
20	Laxey	—	—	—	—	50 0 0	1000 0 0	50 0 0	1000 0 0
400	Lisburne	4 0 0	1600 0 0	7 0 0	2800 0 0	2 10 0	1000 0 0	13 10 0	5400 0 0
1024	Mary Ann	2 0 0	2048 0 0	2 0 0	2048 0 0	1 10 0	1536 0 0	5 10 0	5632 0 0
5000	Mendip Hills	—	—	0 5 0	1250 0 0	—	—	0 5 0	1250 0 0
20000	Mining Company of Ireland	0 7 0	7000 0 0	0 1 0	320 0 0	0 7 0	7000 0 0	0 14 0	14000 0 0
6400	Nether Heath	1 0 0	470 0 0	—	—	—	—	1 0 0	470 0 0
470	Newlands	0 12 6	3750 0 0	1 9 0	8700 0 0	0 14 0	4200 0 0	2 5 6	16650 0 0
6400	Pen Consols	1 0 0	6400 0 0	—	—	0 18 0	5760 0 0	1 18 0	12100 0 0
1000	Polberro	0 11 4	566 0 0	1 12 11	1616 0 0	1 11 9	587 0 0	2 16 0	2799 0 0
500	Providence	4 0 0	2240 0 0	5 0 0	2800 0 0	5 0 0	2800 0 0	14 0 0	7840 0 0
200	Phoenix	—	—	20 0 0	4000 0 0	—	—	20 0 0	4000 0 0
2500	Rhoswydol	2 0 0	1024 0 0	0 7 0	875 0 0	4 0 0	2048 0 0	0 7 0	875 0 0
512	Rosewood	2 0 0	1024 0 0	—	—	—	—	2 0 0	1024 0 0
1600	South Wheal Frances	16 0 0	7360 0 0	4 0 0	2000 0 0	20 0 0	9920 0 0	44 0 0	21824 0 0
12000	Southern Consols	0 2 6	1500 0 0	—	—	0 2 6	1500 0 0	0 5 0	3000 0 0
256	South Caradon	16 0 0	4096 0 0	8 0 0	2048 0 0	16 0 0	4096 0 0	40 0 0	10240 0 0
9000	South Tamar	—	—	0 5 0	2250 0 0	0 5 0	2250 0 0	0 10 0	4500 0 0
280	Spearhead Moor	—	—	0 13 0	210 0 0	0 13 0	210 0 0	0 15 0	210 0 0
4096	Trethwa	0 3 0	614 0 0	0 3 0	614 0 0	0 3 0	614 0 0	0 9 0	1842 0 0
4000	Tretol	0 5 0	1000 0 0	0 5 0	1000 0 0	0 5 0	1500 0 0	0 10 0	1000 0 0
6000	Tinoroll	—	—	—	—	0 2 6	1200 0 0	0 2 6	1200 0 0
9600	Tamar Consols	—	—	—	—	—	—	—	—
520	Trelawny	—	—	1 0 0	520 0 0	—	—	1 0 0	520 0 0
400	United Mines	—	—	—	—	2 0 0	800 0 0	2 0 0	800 0 0
20000	Valley of Towy	—	—	0 1 3	1250 0 0	0 1 0	1000 0 0	0 2 3	2250 0 0
6000	West Basset	1 7 0	8100 0 0	0 13 0	4500 0 0	1 5 0	7500 0 0	3 7 0	20100 0 0
400	West Seton	6 0 0	2400 0 0	12 0 0	4800 0 0	6 0 0	2400 0 0	24 0 0	9600 0 0
1024	West Providence	0 15 0	768 0 0	0 15 0	768 0 0	0 15 0	768 0 0	2 5 0	2304 0 0
512	Wheal Basset	10 0 0	5120 0 0	22 10 0	11520 0 0	12 10 0	6400 0 0	44 0 0	22944 0 0
250	Wheal Clifford	25 0 0	6250 0 0	20 0 0	5120 0 0	40 0 0	10240 0 0	85 0 0	21760 0 0
5000	Wheal Fortescue	—	—	6 0 0	1500 0 0	—	—	6 0 0	1500 0 0
1024	Wheal Kitty (Uny Leland)	0 10 0	512 0 0	0 10 0	512 0 0	0 10 0	512 0 0	0 10 0	1536 0 0
418	Wheal Margaret	2 0 0	896 0 0	2 13 0	1232 0 0	2 0 0	896 0 0	6 13 0	3024 0 0
80	Wheal Owles	6 5 0	500 0 0	5 0 0	400 0 0	4 0 0	320 0 0	15 5 0	1220 0 0
198	Wheal Seton	3 0 0	594 0 0	5 0 0	990 0 0	4 0 0	792 0 0	12 0 0	2376 0 0
4096	Wheal Wrey	0 7 0	1434 0 0	0 7 0	1132 0 0	0 7 0	1434 0 0	1 0 0	4096 0 0
5000	Wicklow Mines	0 10 0	2500 0 0	—	—	—	—	0 10 0	2500 0 0
Totals.		£110,472 0 0	£105,814 0 0	£117,278 0 0	£333,564 0 0				

greater, in case the dividends should be diminished. It is more judicious to select those that are paying more moderately, with a prospect of steadiness and permanency, and perhaps increase.

According to the accompanying table, the amount of dividends paid in the first nine months of this year may be thus classified:—

English Mines	£238,869
Irish " "	17,970
Welsh " "	15,485
Isle of Man, " "	11,240=£333,564

DIVIDEND MINES.

ALFRED CONSOLS has improved considerably lately, particularly in the eastern part of the mine. The lode in the 100, east of Davey's engine-shaft, is worth 60l. per fm.; the lode in the winze sinking below the 80, east of the same shaft, is worth 140l. per fm.; and the south lode, in the stope east and west of the winze under the 80, is worth 50l. per fm. During the past quarter 874 tons of copper ore have been sold, for 6696l., against 943, for 7233l. 18s. 6d., in the previous one. The dividend in the past three months has been 6s. per share, or 1536l. per share, or 5632l., divided in the first nine months of this year, and a total sum of 76,800l., or 15l. per share, from the commencement. The present price of the shares is about 10l. 10s. 6d.

BOSCAN TIN MINE is in 240 shares, upon which a total sum of 4900l. has been paid-up by the present company. It is bounded on the north and west by the Wheal Owles and the Botalack Mines. In the past quarter the sum of 720l. has been divided, making 2160l. for the first nine months of the year, and leaving a balance of 1200l. in hand. The present returns are about 18 tons of tin monthly. At the meeting in Sept. the accounts showed a profit of 920l. for three months. The sett is very extensive, and the lodes numerous and productive; while the prospects are considered very good, and it is stated that a considerable quantity of ore ground is laid open. The engine-shaft is sunk 124 fms. under the adit. The machinery, which is already new, consists of a 40-in. and a 36-in. pumping-engine, a 24-in. stamping-engine, to which is attached 43 heads of stamps, and a 20-in. winding-engine. There are also 20 heads of stamps worked by water-power. The present price of the shares is 93½l. to 97½l. each.

BOTALACK continues to yield good returns. The sett is very extensive, and comprises the Crowns, Wheal Hazard, Chyeronall, and the Higher or Tin Mine, the last of which has been very productive of tin in the past three months. The sum of about 75,000l. has been divided by the present company, the last dividend having been 1000l. (5l. per share), on the 19th of Aug. last. In the first nine months of this year the sum of 4900l. has been paid, and there is a surplus balance of 218l. in hand. The dividend will be declared on Oct. 21. The mine is drained by three pumping-engines, of 24 and 30-in. cylinders, and there are four winding-engines. The tinstuff is returned by water-stamps of 24 heads. There has been a good course of copper ore in the 165 west; this lode is valued at 50l. per fm. The present returns are about 1600l., and the expenditure 1100l., monthly. The price of the shares is about 140l. to 150l. per 200th.

BWYCH CONSOLS LEAD MINE is in the parish of Llanbadarn

working miners, when "out of core," might acquire education and some degree of scientific knowledge.

The Cornwall Railway makes very slow progress. The company will require to borrow more money to complete the line. Mr. Brunel's Royal Albert Bridge, at Saltash, over the river Tamar, is an exceedingly costly affair; and even when the money for it is procured, will be the means of delaying the opening of the line for a considerable period. In the meantime, Cornwall is cut off from the railway system of the kingdom, and suffers a great disadvantage in its different branches of industry.

The Cornish pilchard fishery has this year been more than usually successful on the southern and western coasts, but not as yet on the northern. At Mousehole and neighbouring fishing ports, about 8000 hogsheds have been taken, and at Mevagissey about 4000. It is stated that the pilchards this year have been of the finest quality, and the produce of oil such as has never been previously known; 4 gallons per hogshed used to be the usual quantity, but the fish this year (which are by some considered to be of a different species from what have before visited these coasts) will produce nearly 7 gallons per hogshed. The cured fish are sold to the merchants at from 45s. to 50s. per hogshed, for exportation.

The Tamar Silver-Lead Mine affairs are a matter of comment here: it certainly seems rather extraordinary that Mr. Gardner, the agent of the Prince of Wales, should offer a lease for 14 years to the adventurers. Although it appears very suspicious, I can hardly think Mr. Gardner is influenced by avaricious motives, but, at the same time, if the mining property in the Duchy is to be worked for the benefit of the Crown, Mr. Gardner's conduct demands some explanation. Have the Tamar Silver-Lead Mining Company worked in accordance with the terms of their lease, and are they worthy of a proper renewal? However high the position Mr. Gardner may hold in the Duchy, perhaps he will find that adventurers who risk their money in mining will rather abandon a concern than have terms imposed upon them that are unjust.

At the last West Penwith Petty Sessions an important wages case was heard, and dismissed. Wm. Lidstone complained of Mr. Richard Boyns, manager of Wheal Owles, for non-payment of 24s. 2d. which he alleged to be due to him. There were several minor points involved, but the main question for the Bench to decide was, whether the regulations made by the agents of the mine for its good government should be enforced in this Court, one of which was, that if a man left work without giving a month's notice, his wages should be forfeited. Now, Lidstone admitted that he had not given a full month's notice, but denied that he had hired himself at all by the month; he alleged it was by the day. Mr. Boyns stated it was by the month—24s. 6d. a month. A material point was, whether the rules of the mine were sufficiently brought under the notice of the men, and they carefully made cognizant of them. In answer to enquiries from the Bench, Mr. Boyns said the rules were referred to each settling-day, and four copies were affixed to conspicuous places on the mine: these were sometimes destroyed by the men, or by the weather, but were renewed as often as requisite. With respect to this particular case, Lidstone knew the regulation seven years ago, and again more recently was cautioned, that if he quitted without the required notice, he would forfeit all right to wages. Captain Henry Boyns, told him this on his giving the illegal notice.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

Oct. 9.—The position of the Iron Trade in these counties is sound and healthy, and though the orders for the past week are said not to have been so numerous, the makers of malleable iron have been enabled to keep their works in full operation. The American and continental demand generally is dull, the great bulk of the orders given out being for home consumption. The state of the monetary market is operating prejudicially to the trade, and gives rise to more than the ordinary amount of caution. The demand for pig-iron is dull, and prices are easier. There is a better enquiry for Derbyshire pigs, which continues to realise good prices. After the quarterly meetings are concluded, it is anticipated that the trade will improve, especially if a favourable change should take place in the money market. The new steel works erecting at Whittington, near Chesterfield, are making much progress, with a view to complete the building operations before the intervention of winter, which would impede the progress of the works. Arrangements are progressing very satisfactorily with regard to the opening of the new colliery at Whittington, which was noticed by us a few weeks ago. As soon as the above works are opened a large number of people will be employed to develop the minerals of the place. An improvement has been manifested in the Coal Trade during the past fortnight, and in many districts an advance of 1s. per ton declared.

On Friday evening last, Mr. E. Smith, of Sheffield, read a paper, at a meeting of the Literary and Philosophical Society, "On the Iron Manufacture, in reference to Mr. Bessemer's Process." After narrating the process in all its details, he contended that if the invention did not realise all that the most sanguine might hope for, it might be introduced partially into our mills and forges, with some modification, and effect a saving in fuel and labour, as well as to cheapen some kind of iron work. The lecturer concluded his paper by adding, "Whatever may be the ultimate success of this process, we learn from that excellent authority, David Mushet, that two claimants are in the field as the discoverers, and we are thus in doubt whether we are to speak of this as Bessemer's or Martien's invention. Meanwhile, this invention cannot be useless, but in some form or other will contribute its share to the national prosperity, as every practical application of great principles to the arts has hitherto done; and we may fairly say of the inventors, after every deduction shall have been made for their sanguine expectations, that a Bessemer or a Martien deserve success, and our best wishes that, in forwarding the public weal, they may not fail in benefitting themselves."—Mr. Charles Sanderson described the object of the processes in iron manufacture to be the separation from it of extraneous matters, and to bring the particles of iron into close connexion. Mr. Bessemer's process was a mistake. It did not supply the place of puddling, but produced a decarbonised metal, more or less oxidised. But a large portion of this could not be malleable by reason of the carbon it contained, and therefore would not be acceptable to the workman. The heat in Mr. Bessemer's furnace destroyed it rapidly, and the produce was the same as was sometimes found in the refineries from overblown metal, and the iron so produced was put aside as useless. He showed a specimen of iron puddled, but not rolled, which was malleable, and a specimen of Mr. Bessemer's, which was not malleable. He did not think that the making of steel, a delicate operation, could ever be carried on by such a rude process as Mr. Bessemer's. Iron made by merely decarbonising pig-iron could not be received by the trade, and he thought the iron and steel makers had been needlessly alarmed.—Dr. Shearman described a trial of Mr. Bessemer's iron which he had seen at Woolwich. The ingot was slightly hammered to reduce it for the rolls. It was then rolled to a bar 10 ft. long, 2 in. wide, and half an inch thick, and tested with other iron. While other bars broke with a strain in a longitudinal direction of 40,000, 52,000, and 60,000 to the square inch, Mr. Bessemer's bare 66,000, which was regarded as a proof that there was some fibre.—Mr. E. Smith said Mr. Bessemer made his iron from the best Blencown pig, a very expensive and scarce iron; and if the products of this were compared with iron made from ordinary pigs, there might very well be the difference spoken of.—Mr. Sanderson said, as to fibre, cast-steel, which had no fibre, would bear more strain than any iron.—Dr. Shearman said, in the experiment made at Parkgate some of the iron which remained in the cylinder was like puddled iron, but had no fibre.—Mr. Sanderson said, a had puddler made a deal of raw iron, and it was so with Mr. Bessemer. He got rid of the carbon, but not of the sulphur and other matters.—Mr. E. D. Smith quite believed that the prospect of making steel by Mr. Bessemer's process was very remote. He was surprised that the alleged discovery had agitated so much the iron trade. It might hereafter become one of the steps in making iron, but that it would turn pig metal into malleable iron was not likely.

Few persons acquainted with mining have failed to hear of the extensive collieries and ironworks at Staveley, the property of Richard Barrow. In order to show how rapidly the works have progressed by the skill and energy of the present proprietor, a few facts relative to their progress may not prove uninteresting. The works were originally commenced by the brother of the present proprietor, in 1826, but comparatively little progress was made until they came into the possession of the present owner, in 1842. At that time there was little to be seen of the results of energy which now mark the place. The village itself was purely agricultural, and there was scarcely a dwelling for the labourer to be seen. Since the present proprietor had the management of the works they have been ex-

tended in every possible way. There are upwards of 3000 men and boys employed, and the aggregate daily production of coals from five pits is 2000 tons. The carriage paid to the Midland Railway Company per month varies from 2000l. to 3000l. Upwards of 1000 mineral trucks are in daily use, and there are something like 20 miles of tramways underground. There is railway communication from each pit to the railway station, worked by the Staveley Colliery locomotives, of which there are five in number—one for each pit. In addition to the collieries, there are a vast number of men employed at the iron and stone-pits, and the furnaces, forges, &c. It must follow that with these gigantic works a large amount of labour and anxiety must devolve upon the spirited and energetic proprietor; but such is the excellence of his arrangements, coupled with his extraordinary aptitude for business, that the production of the works in the day is known to him at night by reference to the daily statements which are returned. The village of 1842 has now become a town, with its busy streets, shops, mechanics' institution, library, reading and news room, cricket clubs, and other objects of recreation provided for the workmen. To meet the wants and accommodation of the workmen, Mr. Barrow has erected between 500 and 600 cottages, each with its garden-plot for the growth of vegetables. A large number of cottages have also been built by private gentlemen, and there is a deficiency still to meet the increasing wants of the place. Mr. Barrow has for some time past felt the force of the conviction, that as a large employer of labour it was his duty to provide schools for the education of the children of his work-people, in addition to the parochial schools; he, therefore, ordered the erection of a building, which would do credit to the finest architectural structure in Derbyshire, to answer the purpose of schools, and, if need be, to serve the purpose of a church. This end and aim has been most admirably accomplished, and a building has been completed and fitted up for these purposes. The schools are in the Elizabethan style, and consists, in addition to the various ante-rooms, of three large halls, 60 feet by 30 feet, and 45 feet by 40 feet. The centre hall is fitted-up with an organ, which cost the sum of 200l., and the halls east and west are to be used as boys and girls' school-rooms. There is a belfry, with one bell, and a lofty spire, and the whole building, standing on the crest of the hill, near the railway station, has a very neat and pleasing effect. The building has cost several thousand pounds. It is calculated to afford accommodation for 400 children, exclusive of the centre hall, which may be used as a church for divine service. This building was opened on Friday last, on which occasion there was a grand demonstration, which was attended by the friends of mining education from all parts of the country: amongst those present were Mr. W. H. Barrow, M.P. for South Notts; the Ven. the Archdeacon of Derby; S. Tremehere, Esq., H.M. Commissioner on Mining Education; Mr. J. Hedley, H.M. Inspector of Mines for Derbyshire; Mr. Ashworth, of the Poynton and Neath Collieries; Mr. A. B. Cochrane, of the Woodside Iron Works, Dudley; Mr. Bean, of the Portland Collieries; Mr. Binns, of the Clay Cross Collieries; Mr. Woodhouse, the engineer-in-chief of the Works; Mr. Blackburn, of the West Staveley Collieries, &c. &c. The proceedings commenced at one o'clock. There were a military band and the Leeds choir in attendance, and several volunteers were performed on the organ. Mr. R. Barrow, the founder of the schools, occupied the chair, and he briefly explained that his object in building the schools was to give the sons and daughters in his employ a good education—to teach them to spend their money in the comforts of home instead of the demoralisation of the public house, and if the schools effected this he should be amply repaid for all the expense which he had gone to. Mr. Barrow, M.P., addressed the people in the school on the advantages of education, and the course of instruction which it was intended to pursue in the schools. He said they were free from compulsion or religious bias, and all that would be taught in the schools would be the Ten Commandments, the Apostle's Creed, and the Lord's Prayer. There would be an infant school and an adult school. The Ven. Archdeacon Hill delivered an address on education, and was followed by Mr. Tremehere and Mr. Ashworth: that from the latter gentleman was an eminently practical speech, and was listened to with very great attention.

The present occasion was taken advantage of by the agents employed at the Staveley Works to present Mr. Barrow with a full length life-size portrait of himself, which was most faithfully executed by Mr. J. Lucas, of London, who had the honour of placing on canvas the late George Stephenson, and his son Robert Stephenson. The picture was placed in the school-room, and was presented in an appropriate address which was read by Mr. J. T. Woodhouse, his chief agent. Mr. Barrow made a suitable reply; and, afterwards, the company partook of a splendid collation at his mansion, Ringwood Hall.

THE IRON AND COAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN WOLVERHAMPTON.]

Oct. 10.—During the week the quarterly meetings of the trades of South Staffordshire have been held, commencing at Walsall on Tuesday, at Wolverhampton on Wednesday, and yesterday at Birmingham. Of these Walsall is of the least importance, standing, as it does, on the edge of the coal and iron producing districts, but it promises ere long to take a much more important part in the coal and iron trades, as the rapid development of the great mineral resources of Cannock Chase proceeds. With respect to its chief trades—saddlery, saddlers' ironmongery, and other allied branches of those trades, there is a fair quantity of orders both home and foreign, although the trade is not so brisk as was anticipated, but all classes of workmen are tolerably well employed. On Wednesday the meeting was held at Wolverhampton, but was of less importance than the meeting held on the following day at Birmingham. The resolution to maintain present prices which was agreed to at the preliminary meeting was confirmed, although, except with the very best houses, those prices are not obtainable at the present time. Some contracts were entered into by the first-class makers for the United States, but these were not sufficient to affect the trade generally, and do not alter the opinion expressed in this article last week, that a slack trade is probable for the next few months. Pig-iron is lower, and prices rule at 34. 12s. 6d. for cinder pigs for foundry purposes, and from 34. 15s. to 47. 2s. 6d. for good mine pigs, and at these rates sellers are very anxious to enter into contracts, to which purchasers of pig-iron are not inclined, in the present aspect of the trade. Shropshire pigs, which are of a very superior quality, and command a high price, are offered at a lower rate. The make of pig-iron is large, and I hear of some makers blowing out a part of their furnaces, but others are said to be about to open furnaces for some time disused. The supply of ironstone is larger than it was, and prices are lower, blue flats selling at 17s. 6d. per ton. There are enquiries in the district for rails, but, of course, unless lower rates than those nominally fixed by the trade are accepted, this quality of iron cannot be extensively made in the district. However, the prices as fixed appear to be less regarded than ever, as it is becoming a question—especially with the active competition of so many other iron-producing districts—whether that portion of the functions of the Ironmasters' Association which relates to fixing prices might not, without any loss, come to an end.

The foundries are said to be less busy than they were; and the home trade for general hardware is not very active, but the foreign demand is said to be increasing.

The Coal Trade presents no noticeable feature: prices are not likely to advance to a very great extent for domestic coal, while for the coal used at the works prices are about 8s. per ton, and there is no probability of any increase. Domestic coal sells at from 11s. to 13s.

A correspondent of the *Mining Journal* complains of the special rules for the management of collieries being drawn up by the coalmasters, without the mine agents and underground bailiffs, whose interests they greatly affected. The complaint is certainly just, and might have included the butties and colliers, all of whom had an interest in these important regulations. Apart from the precise shape regulations might actually take, and in this respect such consultation could not but have had a beneficial effect, such a course would have tended to have made the rules more popular with all classes concerned in carrying them out; and, unless the general and cordial approval of all parties—colliers, managers, and proprietors—can be secured, the rules will never work effectively. What was to have prevented the colliers and managers of every coal pit of a certain size appointing delegates, who should appoint a small committee, who could have conferred with the masters in respect to these rules? It would only have been carrying out the principle of gaining the consent of each great estate of the realm to the laws which were to govern them; and the effect of such a proceeding would have been, in many ways, most gratifying, and might have issued in some general and permanent arrangement, by which the representatives of the workmen might regularly confer with their masters respecting any grievance complained of, or the

question of wages, &c., as is done with such excellent results among the carpet weavers of Yorkshire and Durham, where for years such a plan has prevented strikes, and gone far to bridge over the chasm which separates masters and men.

STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

[FROM OUR CORRESPONDENT IN DUBLIN.]

Oct. 9.—There has been again a heavy decline in prices of funds this week, which to-day quote about 1½ per cent. lower than when I last advised, owing to London quotations. The raising of the Bank rate of discount on Monday seems to have been quite unexpected, but the general impression is that this movement by the Bank directors will have a salutary effect in checking the drain of gold. The share market participated in the heavy tone of stocks, and business was extremely limited, being confined to transactions in the leading railways, at lower prices. Mining shares were only slightly dealt in, and, of course, sympathised in tone with other securities. The following are the latest quotations:—Consols, 90½; New 3 per Cents, 91½; Royal Bank of Ireland, 20; Consumers' Gas Company, 8½, ex div.; Mining Company of Ireland, 14; Dublin and Wicklow, 6½; Great Southern and Western, 57; Killarney Junction, 10½; Midland Great Western, 51½; Newry and Warrenpoint, 42.

I had lately occasion to draw attention to Mr. Johnston's property at Magheramagh, the valuable mineral character of which was reported upon by F. Lisabé, Esq., C.E., and I am glad in being able to state that an arrangement has been entered into with the Mining Company of Ireland to work this property; and, having seen the original report, I am sure that the Mining Company will not regret their determination to prosecute workings in this locality. I hope to be able to allude more fully to this subject in my next, and at the same time to touch upon some other matters fraught with much interest to this country.

THE METAL TRADES AND INDUSTRIAL PROGRESS ON THE CONTINENT.

[FROM OUR PARIS CORRESPONDENT.]

Oct. 8.—Our speculators, like the carter in the fable, cry aloud to Jupiter to help them in extricating their vehicle from the mire, but their imperial Jove, like he of Olympus, bids them to do their dirty work themselves. Day after day rumours of extraordinary measures about to be taken were industriously circulated. The return of the Emperor to Paris, it was announced, would be followed by the initiation of restoratives. Morning after morning the *Moniteur* has been connoered over, to see the forced issue of notes decreed, but in vain; the only financial news that met their eyes was the announcement that bills over 60 days would not be taken by the Bank of France, a piece of news not at all reassuring. Extraordinary efforts are made to maintain prices; for a time they rise, but as soon as the artificial stimulants are exhausted down they go. Thus, since last week stocks rose under sustaining pressure, the 3 per Cent. to 68½0 frs. Provincial buyers, we were told, had rushed into the market on receiving news of the fall, but it would seem that the ardour of the country dealers, or their cash, was speedily exhausted, for down they fell, and now stand at 68½0 frs.; the 4½ per Cent., generally very stable, have gone down to 91 frs.; the Credit Mobilier, which interested parties are doing their utmost to keep aloft, has gone up to 1482½0 frs., 15 frs. below last week's prices, but 20 frs. above those of yesterday. In the railway market, Northern have gone down from 950 frs. to 940 frs.; Eastern (new), from 792½0 frs. to 790 frs.; ditto old stand at last week's prices; Paris to Lyons, 1257½0 frs. to 1252½0 frs.; Mediterranean, from 1735 frs. to 1695 frs.; Southern, stationary; Western, from 892½0 frs. to 875 frs.; Grand Central, stationary. It will thus be seen that, in spite of the reactionary spirit, there has been a general fall. None of the securities have risen, except the 3 per Cent., and why they have moved upwards from the prices given in your last can be better imagined than described. The difference between the real resources of France and England is not so great as to warrant a difference of 25 per cent. in the same kind of securities, bearing the same amount of interest. It is the confident belief of many competent persons that, if the Government had all along abstained from meddling with trade and commerce, as the Emperor seems now most wisely determined to do, everything would go on much better; there would be more public confidence, and what is of great importance, much more self-reliance among individuals. When a man knew a speculation would succeed or fail according to its own merits, and not according to the extent of patronage it enjoyed from Government, he would be cautious in embarking. It was one of the wisest of French ministers who said, "*Laissez faire et laissez passer*," but this maxim has never been acted on. Every man here imagines all responsibility to belong to the State, nor perhaps is he altogether wrong, for the State interferes to such an extent that private judgment is out of the question. If carried much further, we shall all be lodged, fed, and clothed—in short, farmed out by the State. In one instance, the Government is paying a bitter penalty for its interference; I allude to the wholesale pulling down of houses that has taken place within the last five years. One of your contemporaries, the *Building News*, which is pretty well circulated here, some time since pointed out the evils of the system. The *Moniteur* took up arms, and essayed to get up a cooked statement, to disprove the assertions contained in your contemporary; in its zeal, the Government organ went too far, and said that workmen were better off now than previously, but unfortunately there is no truth in this dictum; the misery is profound, and the whole blame thereof is laid on the shoulders of the State. I have constantly heard the remark, *Est-ce que le Gouvernement doit souffrir qu'on augmente les loyers comme cela?* for the Government is supposed to be answerable for all things.

The production of Prussian mines during 1855 was very considerable, as compared with former years, and clearly shows that the mineral industry of the country is making rapid progress. The increase on even the year preceding amounted to 21·3 per cent. The *Moniteur des Intérêts Matériels* publishes the following careful abstract of the statistics:—

	Tons.	Amount.		Tons.	Amount.
Coal	8,344,291	£2,875,099	Smalts	128	£4,417
Lignite	2,136,113	277,082	Nickel	34	16,593
Pig-iron	301,397	1,897,750	Arsenical products	57	660
Zinc	39,393	783,078	Antimony regulus	29	855
Lead	11,427	272,427	Alum	29,53	30,275
Copper	1,698	186,618	Copperas	20,65	6,149
Silver	375,496	102,816	Sulphate of copper	332	5,134
Gold	80	346	Sulphur	30	366
			Salt	114,760	223,407l.

The total value of the mineral produce for 1854 was about 5,514,361l., which shows the increase in 1855 to have been about 1,173,900l., and of number of coal and lignite mines working has increased to 849, and of other mines to 1966. The number of miners in the coal and lignite mines was 63,080, and in all other mines 33,341. The mines and salt works gave employment to 54,597 hands, bringing the total to 153,018. Women and children under 16 do not work in the mines or mines, but the number dependent on the workmen is 296,320, making a population of 449,338 souls, being nearly 2½ per cent. of the whole population of Prussia. In 1854 the mining population was 434,467; it has, therefore, increased by 14,871, or 3½ per cent.

THE IRON TRADE—ITS STATE AND PROSPECTS.

The quarterly meetings of the trade at Wolverhampton on Wednesday, and at Birmingham on Thursday, were well attended; the ironmasters from other districts—Wales, Yorkshire, Derbyshire, Shropshire, in fact, every place where iron is produced, had its representatives, and there was a good sprinkling of merchants from the ports. The buyers only were not there in any quantity, and though but a short time since the demand had increased slightly upon the declaration of the trade to maintain existing rates, on perhaps at no previous period was there so little business transacted; on all hands, for all descriptions of iron and materials, complaints of stagnation prevailed, scarcely anything was done, and all sorts of remarks were made and causes set forth to explain why "things were so flat."

It cannot be denied but that a great falling off has taken place in the demand from Canada and the United States, but this has invariably been the case at this period of the year, and although stocks there are admitted to be extremely low, now is not the time to replace them; for the season would be against forwarding iron into the interior of those countries. The present price is no inducement for merchants to hold stocks. The extraordinary home trade, too, at this time of the year slackens, and the extraordinary rate of money assists the depression, and causes all those who can do so to narrow their operations. In South Staffordshire especially does a high rate of interest act most prejudicially; for there are but very few bills ever drawn, in the regular course of business, at less than four months' date, and often at six months. Seven per cent. for more than sixty days

hills is a very great drawback, and must act injuriously to those who are obliged to discount paper for wages, and other engagements, besides which, it happens that bankers are more particular in the class of paper they receive, and take such opportunities as the present for declining any but first-class bills.

That the rate of discount has acted as a check to some extent upon the operations of the week I have no doubt, but, at the same time, the district is in a healthy state, so far as the soundness of its finances is concerned, and come what will, for the present there will be no alteration in the price of iron. There was no attempt made by either the sellers or the buyers of pig-iron to contradict the assertion that too many pigs are being made. Good mine iron can be bought very much below the price it ought to fetch, with bars at 97 per ton. Under present rates it cannot go on, unless there is an alteration in the wages of the district. Nothing but an unanimous movement on the part of the employers can effect this. There is no probability of there being an increased demand before spring, and it is for the manufacturers to consider whether, with such prospects, it is worth while trying to reduce wages, which probably they would have to raise again in six months, or work on as best they may through the winter.

It is my opinion that a reduction would not improve the demand—that the present slackness is not the result of price, and that time only is required to bring a better state of the market into existence. The Shropshire hot-air pigs were quoted at less money than last quarter, but as there is only one house which makes this particular quality, it does not interfere with the quotations for South Staffordshire hot-air mine pigs. It was said on Thursday that a few pig-makers had determined to reduce their make, and I heard of furnaces which were to be blown out. This is the very best thing to be done under the circumstances, and I hope many others will follow in the same course.—IRONMASTER: Worcester Journal, this day.

THE IRON TRADE—THE CORT CASE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I am sure it must be most gratifying to all who have at heart the honour and prosperity of the British iron trade to find its members are now thoroughly alive to the necessity of vindicating the reputation of the inventor of puddling and rolling, and of relieving his descendants. It would be difficult for me to express adequately my satisfaction, for from my earliest years I had been accustomed to hear my father, who laboured so incessantly for the improvement of a manufacture to which he was ardently attached, as the most important and interesting branch of metallurgy, express his deep and vexed sense of the stigma attaching to his favourite pursuit, by the continued neglect and legislative oppression of the children of the nation's greatest benefactor. His life crushed, and his name slighted, in times when the press had less power, and political vice a great deal more, oblivion, like a great alga, had swallowed all but the very extremities of the history. We know that in ancient times, when stonemasons and undertakers were a scanty product, it was the wholesome custom for every passer-by to cast a stone upon the grave of the great and buried dead, and thus every year the monumental cairn increased, swelling that memory which Time would else have devoured, in an inverse diminishing ratio. The name and place were thus preserved, which otherwise could have been nowhere found. Warned by this lesson, it should be the duty of every intelligent mind to cast its memorial offering to departed worth. I only hope that the disgrace in which all have been as nearly involved by the difficult and tardy rescue of the name and family of the founder of so vast a branch of industry as the British iron trade will prove an admonition for the future, and that all men will take care, when interested in or discussing an intellectual acquisition in any section of science, art, or manufactures, to always couple it with the name of the author. I cannot, for my part, understand the apparently too common dislike of recognising original merit. We constantly read that philosophers now hold such an opinion, that such and such a theory has been exploded, but how seldom do we see it said distinctly on such occasions who was the originator of the new opinion, or the exploder of the old theory. Such omissions are not creditable to our honesty, our justice, or our common sense. Surely man is greater than matter—the inventor, as a human being, more memorable than the invention. I hope we may see this amended; a more sensitive attention to the cardinal points of truth, honour, and generous gratitude, may alleviate the habitual catastrophe of living inventors, as well as preclude the performance of posthumous tragedies.

Such a course is to the interest of all. If every man using a valuable invention were now and then to ask himself the name of his benefactor, he would be doing a public service. For instance, through merely this common neglect how much obliquity has the iron trade encountered, which it can hardly be said justly to have deserved. Those few persons who ruined Henry Cort, and perseveringly continued to rob him, have inflicted an equally great injustice on their fellow-manufacturers. Honourable members of the trade, desirous of paying the patent dues, and gratefully acknowledging their benefactor, could not do so, and compete with those whom the base official tribe, by corrupt bargain, had exonerated from payment. It was the great public, the whole body of consumers, who benefited by buying iron 10s. per ton cheaper than if a patent royalty had been added to the cost of production. They enjoyed the comforts of the extension of ironmaking without the toil of making it. The ironmasters were no gainers by the plunder of Henry Cort's royalties; they were all placed on one level, with equal care and risk in their undertakings as if they had been compelled to charge their iron so much higher to cover the inventor's legal demand. All they actually acquired by the infamous transactions of the Navy Pay Office, was to bear a part of the opprobrium, which they might have avoided by the example of occasional memorial offerings, of little more comparative value than the stone cast upon the tumulus of the dead. It is for the whole body of the public now to take up the example propitiously set them by the iron trade, and exhibit an adequate gratitude for advantages which penetrate every interstice of either public or private life. The press is in a blaze on the subject from one end of the kingdom to the other, and Englishmen are never slow to perform their duty when they have been made thoroughly to know what it is. It is true the first appropriators of Cort's inventions, who had also the monopoly of positions, realised enormous profits; but when these lead the subscriptions, as they ought to do, and no doubt will do, with hundreds, the later firms, who rose afterwards in times of more competition, may honourably follow their twenties and their tens, and mark their own sense of their own position in the trade. Men who have attained any public position through the use of these inventions, where they can influence the affairs of this great country, are likewise especially called upon to utter no uncertain sound, but exhibit by the amount of their subscription how far they justly recognise their responsibilities.

And when such men are actually connected with the Government, as for instance, the present Chief Commissioner of Public Works, the demand upon his character takes a still higher range: *apropos* to which, I may refer with great respect to the courtesy, accessibility, and kind consideration evinced by Lord Palmerston since this case was first submitted to him, and further shown by his lordship's grant, last week, of a pension to Mr. Richard Cort. It is true the amount is small, and it can only be considered as a preliminary instalment. But this acknowledgment of the claims is the more gratifying, and the more shows the entire good will of his lordship in duly appreciating the case, because he had previously expressed his fear that it would be utterly impossible, out of the very small yearly sum placed at the disposal of the Government of the British empire for the reward of merit, and the numerous immediate demands on it, to spare any portion for the Cort family. His lordship's deed has, therefore, proved better than his word. It is no small satisfaction to possess a Premier who has reversed the old adage of the unperformed promises of statesmen. I think it also a very incumbent duty in this prosperous position of the case, to express the sense of gratitude which all right minded Britons must feel to the Editor of the *Scientific American*, for his cogent remarks upon the Cort miracle, on Dec. 15 last, and in subsequent numbers. A more energetic appeal was never put in print. The voice which was then heard resounding across the Atlantic has proved no small aid in our efforts to awaken the British mind from its deep and strange mesmeric sleep regarding the author of inventions "now used in manufacturing bar iron in every civilised country under the sun. All nations are his debtors; the benefits conferred on them by his inventions are beyond calculation." These and the rest are the words of truth and honesty, and form a testimony to the merits of a British inventor which demands our warmest thanks, a debt to be repaid with equal candour and justice. There are, I believe, in this country certain dandy drawing-room authors, who affect to sneer at American style. I should like to see them attempt the simplicity, purity, and nerve of expression which characterise this American eulogy of an Englishman. I sincerely trust no Englishman may ever forget to

do equal justice to American inventors, especially when visiting the shores of their ancestors, under the sacred claims of hospitality.

We ought to regard the scientific achievements of those who went out from us, when they come again amongst us, with a parental pride, as our children's honour reflected back upon ourselves, and to be even more guarded than our own with a jealous and generous tenacity. In accordance with which spirit, I beg to state that when, on the 9th of September last, I learned particulars which proved to me, beyond doubt, that Mr. Martien was the true and original inventor, and sole proprietor of the highly-scientific method of refining iron which I had commended in the *Times*, I lost not a day in seeking the same channel to do justice to the American inventor, who had publicly performed the Bessemer process a month before the Bessemer patent was taken. My letter was not inserted, doubtless because practical details are unsuited to the columns of a journal which has to constantly deal, with such power and lucidity, with immense general facts, and cannot embarrass itself with technical minutiae. I should, of course, have been pleased had my letter of correction, placing the saddle on the right horse, received equal publicity as my praise of the spurious inventor; and I am led now to refer to the subject, in consequence of being told yesterday, by a friend just returned from Italy, that he had seen my letter on the Bessemer process translated into the Italian journals. I wonder what King Bomba thinks of it? What kind of meaning does he attach to a revolution in the iron manufacture? Is it possible his spies and police could be purified by a passage through the cauldron cupel.—Oct. 9.

DAVID MUSHET.

THE COAL TRADE.

The following is a statement of the delivery of coals, &c., in the port of London during the month of September:—

	Ships.	Tons.		Ships.	Tons.
Newcastle	255	76,883	Blyth	5	1,611
Seaham	127	31,234	Scotch	5	765
Sunderland	194	60,651	Welsh	56	16,010
Hartlepool & West Hart.	178	51,421	Yorkshire, &c.	38	3,264
Middlesbrough	21	4,916	Small coal and cinders	3	553
Total				885	247,290
Total imported in Sept., 1855					260,101

Comparative Statement of 1855 and 1856.
Imported from 1st January to 30th Sept., 1856.....Ships 7857.....2,335,463 tons.
Imported from 1st January to 30th Sept., 1855....." 7857.....2,303,905 "

Decrease of ships.....30.....
Increase of tons.....31,558

THE RAILWAY COAL TRADE.

Monthly statement of coal and coke brought by railway and canal within the London district, during the month of September:—

Railways.	Tons cwt.	Railways.	Tons cwt.
Great Northern	54,683 0	Great Western	7,844 0
North-Western	38,501 19	South-Eastern	1,289 9
Eastern Counties	8,863 11		
Total by railway in Sept., 1856			109,486 19
Coals by railway in Sept., 1855			113,020 16
Coals by canal in Sept., 1855			1,893 15

Comparative Statement of 1855 and 1856.
Coals by railway from 1st January to 30th Sept., 1856.....901,534 19
Coals by railway from 1st January to 30th Sept., 1855.....775,572 6

Increase in the year 1856—railways.....125,962 13
Coals by canals from 1st January to 30th Sept., 1856.....17,796 5
Coals by canals from 1st January to 30th Sept., 1855.....17,132 3

Increase in the year 1856—canals.....664 2

WEEKLY LIST OF NEW PATENTS.

GRANTS OF PROVISIONAL PROTECTION FOR SIX MONTHS.—W. HEAR, D. SHARP, and G. KNOWLES, Bradford: Furnaces for economising fuel and preventing smoke.—D. O. BOYD, Welbeck-street: Constructing and arranging flues for the passage of air or smoke.—F. WRIGHT, Carlisle: Friction coupling for the transmission of motive-power.—A. V. NEWTON, Chancery-lane: Gimlets, augurs, and other tools which operate by a rotary motion.—A. G. BAYLES and J. GREEN, Redditch: Needles.—J. CORRIALL, Studley: Machinery to supercede hand labour in the operation of filling.—P. W. BARLOW, Great George-street, Westminster: Permanent way of railways.—W. BRATTON, Rotherham: Puddling iron.—C. VION, High Holborn: Metallic moulds, and manner of using them for casting metals. (Communication from Jean Boy, of Paris, founder.)—C. SAYNO, Norwara, Piedmont: Bearings, beds, or sockets for axles, pivots, or other rotary parts of machinery.—E. SABATIER, of Paris: Permanent way of railways.—J. KUSSELL, Wednesbury, and J. B. HOWELL, Sheffield: Manufacture of cast-steel tubes.—S. CALLAN, Brixham: Composition and composition for forming castings, particularly the bottom of ships and vessels.—F. RANSOME, Ipswich: Manufacture of artificial fuel.—W. SMITH, Skinner-street, Snow-hill, and N. F. TAYLOR, Stratford: Apparatus for measuring gas and other fluids, and in regulating the flow of the same.—L. D. JACKSON, Underwood, Nottingham, and H. MYERS, Rathbone-place: Apparatus for the better working of breaks in stopping railway trains.—C. J. CARL, Belper: Operating hammers and stamps.—G. T. HOSFIELD, Sussex-place, Loughborough-road, Brixton: Manufacture of artificial stone.—R. C. ROSS, Glasgow: Paddle-wheels for propelling apparatus for ships or vessels.—W. G. GARD, Calstock: Bits for boring and sinking.

TREATING ORES.—Mr. G. Hahner, of Leghorn, has patented a method of decomposing certain metallic oxides at a high temperature in contact with alkaline chlorides, or other chlorides forming oxychlorides, or chlorides soluble in water, in avoiding the formation of free soda by the addition of a mineral acid, and lastly, separating the metal contained in the solution and utilising the residue. For this purpose, the metallic ore is reduced to pieces and roasted, then pulverised, and again roasted with the admixture of coke, coal, or charcoal, reduced to minute particles. After perfect oxidation of these matters, introduce into the furnace, to be mixed with the ore, a mixture of about two parts or more of chloride of sodium (common salt) or other alkaline chlorides, and three parts of ore already roasted to each part of metal to be extracted. When there is no longer any trace or smell of muriatic acid vapours, introduce the roasted ore into vessels provided with filters, into which vessels pour water slightly acidulated with sulphuric acid. If the ore contains copper or silver, these metals will be found in the solution. The oxides of iron, tin, zinc, &c., remain in the vessel; the oxide of tin is separated by washing, and the oxide of zinc by reducing it to metallic zinc. Gold remains also in the vessel, and is converted into chloride of gold by means of a stream of chlorine which is introduced into the vessel, and the chloride of gold dissolved in water. The precipitation and the refining of the said metals are performed by known means. In certain cases, however, it is preferable to precipitate the copper by means of a stream of sulphuretted hydrogen, or by a solution of common ash, potash, or soda, alone or mixed with lime, &c.

PUDDLING AND REFINING IRON.—Mr. Geo. Parry, of Ebbw Vale Iron-works, has patented some improvements in puddling and refining iron, the object being to subject the mass of metal, while in a molten state, to the action of the elements of water, and thereby to disengage the sulphur and other volatile impurities, and to form a scale of oxide, which, when the metal is cast, will form a protective film, and prevent the metal from being oxidised. The process is as follows:—The metal is heated to a comparatively low temperature, and the metal at the points of injection, and thus produces but a feeble action upon the surrounding or contact surfaces, superheated steam prior to injecting it into the fluid metal, thus causing the steam to approach more nearly to the temperature of the molten metal, and produce a more efficient chemical action. The steam is conducted from any ordinary steam generator to a coil of pipe subjected to the direct heat of a furnace, and in circulating through this pipe it will take up the amount of caloric required to convert it into what is known as superheated or superheated steam, and fit it for the purpose of the invention.

JOINTING METAL PLATES.—Mr. Charles Fred. Clans has patented some improvements, consisting in the production of extended surfaces of metal, by uniting a number of bars or strips in such manner that they are interlaced or plaited together. In order to obtain greater firmness, notch the said bars or strips, and so arrange them that projecting parts fit into corresponding recesses; and round the lapping edges in order to gain a smooth face, then weld the several portions, or apply tin and lead, or other such metals, so as to solder the whole together. The metal plates thus formed may be applied to the construction of metal ships, bridges, gasometers, and other structures in which metal plates are rivetted together.

COMPRESSED AIR.—Mr. R. Clarke Pauling, of Great George-street, Westminster, has taken out a patent for the purpose of discharging water from ships and coffer dams, and propelling vessels, by the force of compressed air. In expelling water from vessels that have either sprung leaks or become water-logged through collision, he proposes, by the means of blast fans or other apparatus, through a flexible hose attached to the fans, to force air of greater power and density than the water in the vessel. He likewise intends to raise sunken vessels by diving-bells, and a similar agency to that employed in the previous instance. In the construction of caissons and coffer dams, the air is to be pumped in the chamber, and the water kept out by closing the apertures, valves, or sluices. In the propulsion of floating vessels, the compressed air is discharged under the surface, and against the water: in this case water offers a resisting medium to the air expelled from the vessels by means of pipes, to be worked by a steam-engine.

IMPROVEMENTS IN THE VENTILATION AND FURNACE DRAUGHT OF STEAM VESSELS.—Mr. Charles Wye Williams, of Liverpool, proposes in the specification of a patent just completed to employ the ordinary rotary fans, or other description of blowing or exhausting apparatus, worked by a small independent engine, or by being connected with the marine engine, for the purpose of obtaining an improved draught of air. The details of the invention are as follows:—He proposes to ventilate the cabins, hold, and other places, by the exhaustion or propulsion of air in pipes or other air passages, circulating through different parts of vessels, providing such suitable outlets or inlets, perforations, valves, or sluices, as may be required. He also employs the same mechanical arrangements to exhaust the products of combustion from the engine boiler furnaces, by the funnels, and thereby promote the combustion of the fuel; or he sometimes causes the air to be forced into the engine and stoke rooms, by which means the furnaces will be better supplied with air. It is obvious that the same fan or air pump, while exhausting one set of air pipes or passages, may at the same time be propelling air in another set of like pipes or passages, when desired.—*Mechanic's Magazine.*

COLLIERIES AT BAGILLT, IN FLINTSHIRE.

MESSERS. CHURTON WILL SELL, BY AUCTION, at the Feathers Inn, Chester, on Friday, the 31st day of October inst., at Two o'clock in the afternoon, subject to conditions, ALL those valuable and productive COLLIERIES, called the BAGILLT COLLIERIES, situate at Bagillt, about two miles from Holywell, and the same distance from Flint, together with the OFFICES, ENGINES, MACHINERY, TRAMWAYS, TOOLS, IMPLEMENTS, and MATERIALS thereto belonging; and also several FREEHOLD COTTAGES and PIECES of LAND, with extensive reservoirs, attached to a shipping stage on the River Dee.

These collieries, which comprise valuable mineral ground, are held under various leases, subject to a moderate royalty. In the land are EIGHT SEAMS of COAL, the aggregate thickness of which is about 33 ft. 11 in., the greater proportion of each of which still remains unworked, and one of which contains a bed of Canal 2 ft. 6 in. in thickness. The coals are of excellent quality, and well adapted for steam-engines, smelting, house, and other purposes. The land also contains SEVEN BEDS of IRONSTONE, of the aggregate thickness of 9 ft. 3 in., which have been most favourably reported upon for their richness, and which might be worked most advantageously in conjunction with the collieries.

The collieries are immediately contiguous to the River Dee, whence coal and iron can at all times be transmitted with great facility, and at a very moderate cost, to Liverpool, and also along the Welsh and Lancashire coasts, and to Ireland. They have also a connection with the Chester and Holyhead Railway, by which coal and iron can be sent to Birkenhead, or any other part of the kingdom; and being situate on the turnpike road between Flint and Holywell, they command an extensive home trade, both for private use and for the very extensive lead smelting and manufacturing establishments of the district, there being a consumption of upwards of 60,000 tons a year within a radius of four miles of the collieries.

For further particulars apply to WILLIAM THOMAS, Esq., Bagillt (the manager of the collieries), who will show the property; to MESSRS. CHURTON, auctioneers, Chester and Whitechurch; or, to MESSRS. JOHN and EDWARD WHITLEY, solicitors, Liverpool.

WANTED, in an ASSAY OFFICE and LABORATORY, a WELL-EDUCATED YOUTH as APPRENTICE. He will have the opportunity of gaining a thorough knowledge of assaying and practical chemistry in all its branches.—Apply, by letter only, to Mr. NEWTON SARGENTSON, Assay Office, 7 and 9, Hackin's Hey, Liverpool.

TO COLLIERY OWNERS AND OTHERS.—TO BE SOLD, 1 new flat rope drum, 10 ft. diameter, with pattern; 2 flat rope pulleys, 10 ft. diameter; a quantity of vertical and horizontal inline rope pulleys, with iron work; 34 iron and 20 wood coal wagons, in good condition, 5 ft. 6 in. long, 4 ft. wide, gauge 3 ft. 1 in.—Apply to Mr. J. BOOT, mineral surveyor, Huccall, near Alfreton, Derbyshire; or Messrs. JAMES SUTTON and Co., Church Lawton, Cheshire.

ENGLISH AND AUSTRALIAN COPPER COMPANY.—Notice is hereby given, that the GENERAL MEETING of the shareholders, adjourned from the 31st July last to 20th October inst., will, in compliance with the receipt of the balance-sheet and accounts from Australia, stand ADJOURNED UNTIL FURTHER NOTICE. By order, BENJ. WILKINS, Sec. Offices, 17, Gracechurch-street, London, Oct. 11, 1856.

WEST CRINNIS AND REGENT UNITED MINING COMPANY, IN THE PARISH OF ST. AUUSTELL, CORNWALL. Conducted on the "COST-BOOK PRINCIPLE." Capital in 6000 parts or shares.—Deposit 10s. per share.

DIRECTORS.—CHARLES HINKS, Esq., Heathfield-road, Handsworth.—CHAIRMAN. HENRY PARRISH, Esq., Clifton-place, Moseley-road, Birmingham. WILLIAM JOHN PERCE, Esq., Waterloo-terrace, Northampton. (With power to increase their number.) MANAGING AGENT.—Capt. John Webb, St. Austell, Cornwall. PURSER.—Mr. Thomas Lewis, Corn Exchange-buildings, Birmingham. BANKERS.—Messrs. J. L. Mollet and Son, Cherry-street, Birmingham.

OFFICES.—CORN EXCHANGE BUILDINGS, BIRMINGHAM. The West Crinnis and Regent United Mines are held under leases for 21 years, at 1-15th dues; the latter under the Earl Mount-Edgemore, the former under Major Caryon, and are situated in one of the best mineral districts of Cornwall, and adjoin each other. They are surrounded by the following mines, viz., South Crinnis, South Cadra, Great Crinnis, Penbroke and East Crinnis, Charlesston United, Par Consols, &c. They possess more than ordinary advantages; and there can be no doubt but that when judiciously worked, as they are now proposed to be, they will prove highly remunerative.

The proposed capital of the company is divided into 6000 parts or shares, 3000 of them being preference shares, and bearing a preferential dividend of 10 per cent. of the profits, over and above that payable on the 3000 ordinary shares, for a period of five years after the payment of the first dividend by the company; thereafter to rank as ordinary shares. The 3000 ordinary shares are held by gentlemen of property, as follows:—The "West Crinnis Mining Company," and a considerable number of the preference shares are already taken up; on these 3000 shares three calls of 10s. each are made, which it has been determined shall entitle them to rank as of equal value with ordinary shares in the West Crinnis Company, upon which 43 17s. 6d. per share has been paid, in addition to the preferential dividend of 10 per cent. above named. The deposit will be returned without deduction if two-thirds of the shares are not applied for.

Reports on the mine by Capt. John Webb, J. Jenkin, and W. Kemp, are contained in the detailed prospectus.

Prospectuses may be had on application to the purser, Mr. T. Lewis, Corn Exchange-buildings, Birmingham; Mr. Wm. CHARLES, 27, Austinfriars, City, London; Mr. J. G. PARKER, 33, Essex-street, Strand, London; Mr. W. J. PERCE, Waterloo-terrace, Northampton; Capt. JOHN WEBB, St. Austell, Cornwall; Mr. ROWLAND HILL, 3, Mount-place, Bloomsbury, near Southampton; Mr. J. Moss, 53, Broad-street, Reading, Berkshire; or, Mr. HENRY HALL, Bromley-villa, Gloucester; to either of whom applications for the remaining shares may be addressed.

IMPROVED FURNACES.—Mr. Charles Frow, of Wakefield, provisionally specified some improvements in furnaces, for steam-boiler and other purposes, which consist in arranging the furnace with two or more tiers of fire-bars, the lower bars being of the ordinary description, and the fire having an up-draft, whilst the upper fire has a downward draft; the flame and smoke being caused to pass downwards through its own fire, and over the fire on the lower bars. Construct the upper fire grate of water tubes, which communicate at both ends with larger tubes connected with the steam-boiler, or with other vessel containing water, or (in case of boilers in which the furnace or fire-box is surrounded by water spaces, as in locomotive and similar boilers) connect the water tubes forming the upper fire grate at one end with the external water space of the furnace or with a large tube, and at the other end with a water space connected with the sides and upper part of the fire-box or furnace; this projecting water space is continued downwards below the level of the grate, so that the flame has to pass under it before it reaches the tubes or flues. In place of continuing the descending water space below the level of the tubular fire grate, a similar projection of fire-resisting materials may be so arranged as to terminate at its bottom in a horizontal line across the furnace, parallel with the surface of the lower fire grate; feed the furnaces by means of a hopper, through which the fuel descends into a chamber, through which it is forced on to the fire-bars by means of a plunger moving laterally. Apply a means of obstructing the free escape of the atmosphere from within the furnace by means of water through or in contact with which it must pass off, or by adaptation of the form of the chimney flue, smoke-box, or other part, at the time that air is forced into the furnace, by which means compressed atmosphere may be obtained in the furnace at the desire of the fire attendant.

RAILWAY TRAFFIC.—The traffic returns of the railways in the United Kingdom, for the week ending Oct. 4, amounted to 481,000T, and for the corresponding week of 1855 to 459,054T, showing an increase of 22,946T. The gross receipts of the eight railways forming their terminal in the metropolis amounted for the week ending as above to 216,084T, and for the corresponding week of last year to 206,325T, showing an increase of 9759T.

The increase on the Eastern Counties Railway amounted to 1433T, on the Great Northern to 489T, on the Great Western to 2484T, on the London and North-Western to 2525T, on the London and Blackwall to 207T, on the London, Brighton, and South Coast to 1239T, on the London and South-Western to 841T, and on the South-Eastern to 236T,—total, 9759T. The receipts on other lines in the United Kingdom amounted to 265,870T, and for the corresponding period of 1855 to 252,729T, showing an increase of 13,141T in the receipts of those lines, which, added to the increase on the metropolis lines, makes the total increase 22,946T, as compared with the corresponding week of 1855.

The Stockton and Darlington Railway receipts for the month of September were 30,167T, being 605T more than in Sept., 1855.

The Copiapo and Caldera Railway Company receipts for the six months ending June 30, are officially stated at 61,746T 19s., the expenditure at 25,592T 17s. 4d., and the profits at 36,154T 1s. 8d. This shows a profit at the rate of 16 per cent. per annum upon the capital of 449,136T.

CARDIGAN AND CARMARTHEN RAILWAY.—Mr. Jay, the contractor, has agreed to construct the line from Carmarthen to Llandysul for 135,000T, himself subscribing 60,000T, thus leaving the shareholders 75,000T only to supply.

GREAT WESTERN RAILWAY OF CANADA.—From the report just issued by the directors it appears that, although a surplus of 8055T is carried forward to the current half-year, after payment of a dividend at the rate of 8 per cent. per annum, this rate of distribution is only maintained through the directors placing to the credit of "revenue" a sum of 27,000T, derived from premiums on shares and bonds of the company which have been sold in the market. As one of the reasons for this arrangement, the report observes, "the use of the amount of the present time having the effect of maintaining the rate of dividend hitherto paid." The directors, however, express a hope that the same rate of dividend will be paid during the current six months, "without extraneous assistance."

THE LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending October 4 were 10,392T 13s.

At the Auction Mart, yesterday, Mr. Shuttleworth, held a second auction of depositors in the Royal British Bank, which excited considerable interest. The prices bid, varied in most cases from 9s. to 15s. in 1T; but for two lots, amounting together to 700T, the biddings reached 15s. in 1T. Two lots were sold by private contract, prior to the sale, at 10s. 6d. Another sale is announced to take place on Friday.

The National Discount Company is now fully registered under the Joint-Stock Companies Act of 1856.

Colonel Waugh, Surveyor-General of India, has completed his computations of the positions and elevations of the peaks of the Himalayas. The result was to deposit the mountain Kanchinjanga from its throne as the highest point on the earth's surface. That distinction belongs for the present to a peak 100 miles from Kanchinjanga, and between that mountain and Katmandoo. This peak is ascertained to be 29,002 feet above the sea level.

In our last Journal we erroneously stated the dividend in Lusitanian at 5s. instead of 1s. 9d., as declared Sept. 3.

HULL, Oct. 9.—The fall in the market has brought in buyers, it being considered that the Bank of England measure, although necessary, will be only of a temporary nature, and that under any circumstances it is on the Continent, and not here, that things are unsteady.—T. W. FLINT and Co.

BRITISH MINES.

PAST WEEK. The parcel lead ore, computed 10 tons, is purchased by Messrs. Walker, Parker, and Co., at 9*s*. 3*d*. per ton. The valuation of the materials and machinery on the mine shall be forwarded in a fortnight.

WHEAL MAULIN.—*W. Tregay, Oct. 4:* There has been nothing of importance cut yet in the adit cross-cut at Coumb's; it will be necessary to run down an adit-shaft here for air. The water at the engine-shaft is now down to the 16, and we are working pretty well.

WHEAL NELSON.—*Wm. C. Vivian, Oct. 4:* In the 60 east the lode is small and unproductive. In the 44 east the lode is 1½ ft. wide, producing copper and tin ores. In the 44 west the lode is 1 ft. wide, much improved in appearance, and producing yellow copper ore, and about 100 lbs. per ton. We have suspended the driving of the 32 east cross-cut, and re-commenced driving the same west of Kenworthy's shaft. In the adit level being driven west of cross-course, on the north lode, the lode is 3 ft. wide, impregnated with copper ore.

WHEAL ROBINS.—*Jas. Nancey, Oct. 4:* We have not yet reached the lode in the 75 cross-cut; the distance now driven is 19 fms. 5 ft. 8 in., and the price for driving is 12*s*. 6*d*. per fm.; the strata consist of hard killas, intermixed with lines of mudic, and shows as if we were getting near the lode.

WHEAL TREBARVAH.—*W. Johns, Oct. 6:* The present workings of this mine are confined to the north lode. The engine-shaft has been sunk to the 60, and operations suspended, and the water left to rise to the 30; a line of rods have been laid down, 119 fms. long, west from the shaft, and a flat-rod shaft sunk to the 60, and extended east 29 fms. on the course of the lode; in the present end of the lode there is no water. The 30 will be raised to the 20 shortly, we can hear the men speaking from the bottom of the 30 to the 20; as soon as this object is accomplished it will enable us to set tribute pitches, and resume the driving of our cross-cut to cut the south lode, which has been productive in the adjoining mine. The sett is very extensive in length, and there are two south lodges known to traverse the whole length of the sett, which have proved to be productive in the adjoining mines, and have yielded a fair quantity of ore, so far as laid open in this mine, as shown in the section; and, for the further development of the mine, I would strongly recommend the following plan: To put up the engine-shaft, to pump the water out to the 50, and drive this level to lode; when this communication is effected, remove the flat-rods to the south lode; we shall have sufficient materials to sink 20 fms. deeper than the present bottom of the old mine; it will not require a great outlay for so doing. It would be desirable that a horse-wheel be erected immediately, to clear and secure these levels on this lode so deep as the water is drained, when, most probably, tributaries would be working very shortly.

WHEAL TREFUSIS.—*Z. Carkeek, Oct. 8:* On Field's lode, Juleff's engine-shaft is sunk below the 30 fm. level 9¼ fms.; the lode is 2½ ft. wide, composed of spar and flookan, with stones of copper ore. In the east the lode is 1½ ft. wide, and spar and flookan, with stones of copper ore. In the west the lode is 2½ ft. wide, composed of soft spar and gossan, with a little black and grey ore, of good quality—a very promising lode. We have suspended the 15 fm. level east. In the tribute department, we have three pitches working at 8*s*. tribute for tin and copper ores.

WHEAL TEIDYD.—*D. Lanksbury, Oct. 7:* There is little alteration to notice in either of the levels since last report. The ground in the engine-shaft is a little harder than usual.

WHEAL TREVELYAN.—*John D. Osborn, B. Gundry, Oct. 4:* Watson's engine-shaft has been sunk during the past week about 4 ft., in favourable ground. The 30, east of Watson's, on Park lode, is the same as last reported, as the lode has not been taken down since. In the winze sinking below the 15, east of Watson's, on Park lode, is a branch of grey copper ore, about 5 in. wide. We hope to give you further information in our next, as we intend to take down the lode in the above and winze, next week. We have day-to-day drawn to surface a small pile of rich grey copper ore from the above winze. Our tin department is the same as last reported.

WHEAL UNITY CONSOLS.—*J. Vivian, Oct. 6:* The engine-shaft is now down 5 fms. below the 19; the lode is exactly the same as last reported on. In the 19 east the lode is about 4 ft. wide, kindly, and worth about 8*s*. per fm., at present suspended; the men are employed in rising against No. 1 shaft, which we hope to hole in about a fortnight. In the 10 east the lode is about 1½ ft. wide, kindly in appearance, and opening tribute ground. In the adit east, on the caunter lode, the lode is about 1 ft. wide, composed principally of iron and gossan; we are opening on it at the rate of about 10 fms. per month. We have opened up our eastern ground with tunnelling and expediting well, at your request, increase the party there at our next monthly setting. We calculate on sampling at the regular time from 40 to 50 tons of pretty good copper ore, and about that time we hope to have about 50*t*. worth of black tin sale.

WOOD MINE.—*S. Cook, Oct. 8:* The shaftment will complete the lift, rods, &c., and resume the sinking on Friday next. We have had a small accident in breaking one of the pumps. This has caused a little delay, but it is all put right again, without the expense of a new one. In the 14 and south there is no lode taken down. The same may be said of the winze. We sampled, on Friday last, a parcel of lead ore, computed 5 tons.

WHEAL ZION.—*J. T. Phillips, Oct. 8:* The new discovery in the back of the 30 is still a good lode, although not so rich as last week; re-taken by the same party, at 2*s*. 6*d*. in 1*d*, or rather, at least since Saturday. We calculate having full 30 tons of ore broken down 3¾ fms. of ground. This discovery has been made about 8 fathoms below the level of the adit, which is 40 fms. behind the present bunch of ore. Having had good grey ground in the back of the 30, about 25 fms. before reaching this point, we consider it advisable to drive the adit level west, over the grey ground; it may not be generally known that the back of the 30 is scarcely 15 fms. below the adit. In the 40 west we have a part of the lode standing to the north, and are cross-cutting in that direction to prove it. The 30 east shows no further improvement; the same remark may be made of all the eastern ends.

Mining in Jamaica.

HOPPE SILVER-LEAD MINE.—The adventurers have engaged Mr. George Dartington; and it is stated that under his management it is expected to prove a very valuable property.

MOUNT SALUS (COPPER).—The operations at this new mine, situate in St. Andrew's, are being prosecuted with spirit, by a few capitalists who have associated themselves for the purpose of developing its mineral treasure.

RIO GLAÑDE.—Operations are at present confined to keeping open the galleries already driven, and taking out such ore as may be got at trifling expense.

CLARENDON CONSOLIDATED MINING COMPANY.—At Stamford Hill, the appearance of the lode at the shaft sinking below the 35 continues much the same as for some time past, composed of flookan, spar, iron, green and blue carbonate, and stones of copper ore: we have still some water coming in the bottom of the shaft from the eastward, which somewhat retards our progress in sinking. In the 35, north-east corner, the lode is about 5 ft. wide, strongly stained with carbonates, and spotted with a yellow copper ore, easy for driving the slopes in bank of this level, as also the slopes in bottom of the 32—producing some saving work. In the 36 cross-cut the ground is, I think, a shade softer for driving through than it has been. Last week we intersected a small branch in this end, bearing nearly north and south, and dipping towards the lode, composed of flookan, spar, and copper ore: we are pressing forward as fast as we possibly can with this work. The ground in the 38 cross-cut is still hard for driving through, and thickly spotted with mudic.—*F. C. HARBUR.*

The following is the result of the assay of ore, per *Whistling Wind*, from the Wheel Jamaica Copper Company:—“Liverpool, Oct. 9.—No. 1, 21·91 per cent. pure metallic copper; No. 2, 13·70 ditto; No. 3, 8·73 ditto.” This ore is merely hand-dressed, no machinery of any kind having been as yet erected.

THE AUSTRALIAN LAND AND EMIGRATION COMPANY (LIMITED).—A prospectus has been issued for forming a company, the object being to facilitate emigration to the Australian colonies, to buy fertile tracts of land, and to let the same to emigrants who shall be selected as in every respect qualified for the purpose of colonising and improving the land. It is stated that suitable land may be bought at 1*s*. per acre, and there are numerous instances of properly cultivated land producing, per acre, from 20*l*. to 40*l*. per annum to the settler. It follows, therefore, that the progressive value of the land must necessarily be rapid and great, in addition to which all improvements made by settlers remain upon the land at the expiration of the lease and accrue to the company; this fact, together with the rapid improvements of the entire colony, arising from the continued and great influx of emigrants, will soon raise the value of the land far above its original cost. The gross dividend for the select agricultural lands in the Australian colonies is a plentiful supply of labour. The district selected by the company is watered by the Boyd, Clarence, Tweed, Brumbie, Logan, Teviot, and Albert Rivers, in addition to which it is watered by the Urrum, Myrtle, Ironstone, Deep, Reynolds, and Yarrill creeks. A proof of its fertility is its abounding with the finest cedar, with which it supplies the Sydney and Melbourne markets. A steamer is already plying on the Clarence River conveying the produce of the neighbouring settlers to market, an advantage by which cheap communication and a ready outlet for produce are combined, without the exorbitant cost of land carriage. It is fully expected that the rapid development of this enterprise will be materially accelerated by its principal promoters having already sent out many thousands German emigrants to Australia, now employed there as contract farm labourers, vine dressers, shepherds, and in other capacities, and whose term of service expires in a year or two. These people are generally in possession of some means saved out of their wages, many of whom will be glad to settle in the district proposed for selection, on account of there being a small German settlement in its neighbourhood, a circumstance affording an inducement which they will not wish to meet with elsewhere. The company is divided into 10,000 shares of 10*s*. each (100,000*l*.), with power to increase the capital, and any party applying for an allotment must at the time deposit 1*l*. per share.

MINING RIGHTS OF THE DUKE OF BEAUFORT.—It is pretty generally believed, at Swansea, that by the Town Hill Inclosure Act of 1762 the Duke of Beaufort was entitled to the minerals under the whole of the Town Hill and Burrows, but, perhaps it is not so well understood by the public to what extent those rights may be exercised to the deterioration of the surface; and accordingly parties have been induced to take grants of building leases from the Corporation of Swansea, as owners of the surface, without reflecting upon the possible consequences to the houses and other erections which may be placed upon them. For example, I believe the County Magistrates are not aware of the fact that their jail is built upon the Duke's soil, which the Duke is to lose the minerals, and the Corporation of Swansea are ignorant of the fact that the Duke is to lose the purchase of the Corporation's reversion in the lease of the land on which the Infirmary and poorhouse are built. I am desirous of attracting the builders of Swansea to this state of things, feeling that the day is not far distant when the Duke will find it to his interest to work the minerals known to underlie every portion of the Burrows and Town Hill. It has been thought by some lawyers that if houses have been built 20 years, a right to support has been acquired; but I believe this notion has been of late shown to be fallacious.—*FRAS. O. HOOPER : Sackville-street.—Cambrian.*

MADAME TRUSSARD'S MUSEUM is replete with interest: the entire establishment exhibiting portrait models of all the notabilities and eccentricities of this and former days, habited in the costume usually worn, displaying chaste dresses, or gorgeous state and artistic habiliments.

Notwithstanding Acts of Parliament and the appointment of Government Inspectors, it is our painful duty still to record that in our collieries there yet exists a great disregard of human life. In the case now about to be commented upon, it appears that on the part of the proprietor there has been shown a great carelessness and laxity of management. Two men, SAMUEL SMITH and SAMUEL HODGSON, were killed on an explosion of fire-damp at the Grange Lane Colliery, belonging to JOSEPH STENTON, of Ecclesfield. This gentleman is the owner of several pits at Grange Lane, the shafts of which extend over an area of six acres: six of them are ironstone mines, and the other, in which the explosion occurred, is a coal mine, the coal being got not for sale, but for use on the premises. The coal pit has been for some time very much recently sunk, and was almost devoid of ventilation. The workings were very cramped but one "bank" and the accident occurred when there were four men in the pit. It was stated by one of the witnesses that the explosion was caused by Fox, the underground steward, entering the "bank" in which there was an accumulation of inflammable gas, with a lighted candle; this, however, he denied. Out of the four men in the pit at the time two are deceased, and, therefore, can bear no evidence as to the cause of the explosion. It appears from the evidence of Fox, who is much injured, that he was engaged by Mr. STENTON to look after the ironstone and coal pits at Grange Lane, both in the workings below and at the top of the shafts. On the day of the accident he arrived at the coal pit a little before seven o'clock in the morning; helped to fill some carts; afterwards filled a water barrel; assisted in unloading some hay, and, for the time that day, descended to look at the underground works at half-past ten o'clock. SMITH enquired of him if he were going to try the "bank" a little further ahead, in which an accumulation of sulphurous gas had been reported? but he replied, as he had not a DAVY lamp with him, he should not try it until the morning. He then went to the slit, four or five yards above him. He immediately blew out his candle, and lay down. On getting up he went in search of SMITH, and found him dead within a yard or two of where he had left him. He did not see SMITH with HODGSON; he would have been suffocated had he remained to see for him. Previous to this a labourer, of the name of JOSEPH BROWN, had told him the place was not fit to work in. On cross-examination Mr. MORTON, the Government Inspector, the witness deposed he was down in the pit the whole of the day before the accident (Monday) though SMITH and another man were at work; nor did he go down nearly eleven o'clock on Tuesday. Mr. STENTON, the proprietor, he instructed him to go down in the pit whenever he thought proper, and there were any complaints. He stated he was engaged to do every thing, and, although underground steward, he did not attend to the ventilation. When he undertook the stewardship there was no ventilation at all. Since he had been there some improvements had been made. From the tenor of the evidence of this witness, which it is here unnecessary to dilate upon, it would appear that the men went down at what they pleased, and that so long as the work was done for the proprietors' regulations were disregarded. He further stated that on occasions he never been in the pit at all, being engaged in filling ironstone for STENTON's orders, and various other jobs attached to the works.

Mr. STENTON, the proprietor, stated that he had paid STREX, his usual underground steward, 24s. per week, but owing to some disagreement about the ropes, they had parted, and until he could better suit him he had engaged Fox, at 10s. per week (which, as Mr. MORTON observed, would be at the rate of 17d. per week for each pit, to look after the ventilation, and keep the owner free from responsibility). Further, they had lamps in the office to try the "bank" with; it afterwards appeared that these were in working order. He was told on Monday the pit was not fit to work in, but, nevertheless, he allowed the men to go down on Tuesday. In reply to Mr. MORTON, Fox said the furnace fire was not in operation more than once a week. The rules which have been adopted by Mr. STENTON have not been approved of by the Secretary of State, and, therefore, are of no value. In summing up the evidence

stated that there was certainly never greater negligence, inattention, or ignorance, displayed by an underground steward, than in this instance, but whether it was of such a character as to justify a charge of manslaughter was very doubtful. The jury then returned a verdict of accidental death; adding they felt called upon to express a strong opinion that the pit was in a very bad state of management, and defectively ventilated. We are informed the Government Inspector will take proceedings against Mr. STENTON, under the new Act of Parliament for regulating the working of collieries.

The above is a brief résumé of the inquest held on the unfortunate men who in this instance it will be seen, have been sacrificed to the cupidity of the owner of the colliery. A direct contravention has been made against the Act of Parliament. Here was a man engaged at the low rate of 10s. per week, not only to look after the ventilation of the pit, but, likewise, supposed to be employed as a common labourer, loading carts, &c. The former steward states that Mr. STENTON would go to no expense; the Inspector says that the lamps were not in proper order—in fact, it would appear that the sole desire of the proprietor was to obtain the greatest amount of work at the least cost, regardless of human life, and reckless of consequences. Such conduct deserves condign punishment; and we trust that, in this instance, an example will be made. Owners of collieries, whether they be large or small proprietors, must be taught to know that they cannot play with life. Property has its rights, but, at the same time, it must not be regardless of its duties.

For a considerable period the accidents in coal mines have attracted the attention of the community. In order that some check should be placed over the coalowners, and protection afforded to the men, not only from their proprietors but from themselves, Government inspectors were appointed, certain codes of regulations were laid down, and these were further confirmed by Acts of Parliament. These must be strictly carried out; proper persons must be appointed to supervise undertakings; their capabilities must be such as would give confidence, not only to their employers but the workmen engaged under them. How could Mr. STENTON have imagined that a man could look after seven pits, superintend the ventilation, load carts, and other labouring work, for the munificent remuneration of 10s. per week?

At present we make no further comments, but we are much mistaken if Mr. STENTON, the Government Inspector, does not yet have a further enquiry into the case; so that for the future Mr. STENTON will be obliged to conduct his mining operations with more care, although probably he may yet obtain underground stewards at the minimum rate of wages which his liberality allows them.

Notwithstanding the vast resources of our mining properties in this island and their enormous returns, they have hitherto been regarded by most of our great capitalists (except those immediately concerned) as a great swindle, or a grand systematic humbug, because a few, we say a few comparatively, have, by injudicious management, lost what they embarked in mining speculations.

The astounding revelations disclosed by the British Bank failure ought to teach the world a lesson: before the great searchers of all commercial pursuits—the Bankruptcy Court—it has been proved the only remuneration portion of the estate is the Welsh mining property. Had this been properly managed, what might have been the issue? The same recklessness of conduct and inefficiency of management, no doubt, on proof, will have characterised this as all their other proceedings.

It is to be lamented that the system of MINING has been so much neglected, and that the few prizes in the grand lottery should have attracted the cupidity of the multitude who foolishly wish and expect, by the outlay of a few pounds, to become LONDONERRYS, BASSETS, or BEAUFORTS, whose extensive properties rumours has multiplied a thousand fold. Few persons, except those actually engaged in these pursuits, are aware of the difficulty of arriving at the true status of this important element of our national welfare. The Duchy of Cornwall was, at an early period, established to encourage and assist miners, and certain grants were made in consequence; but, until lately, the only assistance the miner has received has been by means of the Stannary Court, through which he obtains a tardy redress. Up to a brief period, the Stannary offices had been considered sinecures, and disposed of to persons wholly unacquainted with the duties, and consequently totally unfit for them. We are proud to be the herald of a better state of things: though HENWOOD and BERKELEY did great things to cleanse the Augean stable, yet we still see room for the active operations of its present efficient officers.

The publication of regular returns, afforded through the medium of our excellent correspondent, Mr. ROBERT HUNT, is not only a source of gratification to us, but of world-wide utility. We hope our German, French, and Belgian neighbours will make this example their model.

It behoves us in England, as the head of the mining world, to be up and doing: we have rich deposits, and we must remember the world is awake to the treasures that lie under their feet.

The plough-shares of the world are made in England, and she has hitherto furnished the great iron nerve, or rather system, of communication that has astonished it; that position we should most sedulously and perseveringly cultivate.

No person in the sphere of our knowledge deserves the thanks of the public, and ourselves in particular, for his scientific and practical researches into, and adaptation of, this science as Mr. HUNT, to whom, if any testimonial from miners be due, a monument should be raised during his lifetime—"We will not wait till that heart is laid chilly and cold, for its friend beating fervently now."

As the circular sent to the various mines say they do not require the Duchy fee of 1s. in 17, during the next six months (which is really not felt by the mines), we suggest the fee during the time it is not wanted be paid to Mr. HUNT, as a memorial during his lifetime of his fellows' good feeling towards, who has expended "the morning of his life" in their cause.

We commend these remarks to the authorities that be, and hope that attention being drawn to Mr. HUNT's merits, he will publicly, or out of that interest he so ably advocates, receive that remuneration his well-spent life so richly deserves.

When ignorance prevailed in respect of regular mining, and when there were no means of exploring far beneath the surface, it was not surprising to find that localities which have since proved most valuable and extensive as mineral deposits should have been wholly passed over or neglected. For a very long period in the early annals of mining in this country, Cumberland was the only place in Great Britain whence copper was procured, and even as late as the reigns of HENRY VIII. and EDWARD VI. various Acts of Parliament were passed prohibiting the exportation of any description of brass or copper, "lest there should not be metal enough left in the Kingdom fit for making guns and other engines of war, nor for household purposes."

A very different state of things exist at the present day, and our recent articles on comparative statistics of mining show how rapid has been the increase of every kind of mineral production, although it was not until the beginning of the 18th century that Cornwall, which is now a complete mining county, assumed a business-like appearance in the copper trade. In 1729, the total quantity sold there was 2216 tons, and in 1855 it approached close on 200,000 tons. Its position as to lead was even still more remarkable, for as recently as 1835 the total return was only 140 tons, while now one mine alone yields 6000 tons per annum, and numerous others in equal proportion; it is, however, a fact so well determined that our consumption and export trade of the various metals increases yearly, that we need not dwell on the point; and, indeed, our object is to encourage home enterprise for developing new districts that the supply may keep pace with the demand. The want of knowledge in the early miners was the cause, no doubt, that Cornwall and Devon were so long disregarded; and, indeed, it is within a very limited number of years that the latter county was considered worthy of search.

There are unquestionably many parts of the United Kingdom teeming with mineral wealth, of one class or another; and now that the science of mineral engineering and geological knowledge can be brought to bear, we confidently look for a very different state of things in a few years; indeed, another year will, we feel assured, produce great changes. Everything tends to this end. Enterprise is ripening fast, money is abundant, the general trade and commerce of the country is in a sound and prosperous condition, and the demand on the produce and manufactures of Great Britain are increasing from every part of the world.

It is not the miner or the manufacturer of metallic materials who alone benefit by such an expansion of business. Its effect is on the general community, and probably to none more than the landlords or proprietors of estates; not only of cultivated and productive estates, but of those pro-

perties which in other respects are mere barren rocks and mountains, or dreary wastes of bog and moor: in fact, land has risen in our time from 5s. to 1500s. per acre, from the discovery of coal and iron; and many similar instances will again occur.

Enough has been said to show that extent of discovery does not limit discovery, but rather the reverse; and a very judicious remark in the writings of the Rev. HENRY MELVILLE may be aptly quoted:—"The field of science," says this writer, "is such that he who stands on its border may seem to himself to have made great advance; but he who has gone beyond the border learns at each new step that the field is wider than he thought it at the outset. God has so built—so replenished the universe, whether of matter or of mind, that every investigation, every discovery, shows us rather how much remains concealed than how much has been detected. Every fresh height reached is but a point from which to see that there is yet a higher beyond; and to multiply the instruments of discovery is to multiply a hundredfold what is yet to be discovered."

Once more we, therefore, strongly recommend to Irish landlords, and all capitalists, the prompt and due consideration of the resources of their island, and the vast capabilities of realising them for general prosperity and personal aggrandisement. We are glad to find that some attention is already being given to the subject in Dublin, and other places in our sister isle. Our correspondent in the Irish capital alludes to the fact, that in the county Mayo some very successful explorations have been effected, and the anticipated results quite coincide with the view we have taken, based on valuable and various reports by experienced engineers and miners, that the west of Ireland generally, and especially the county alluded to, contains every description of metallic ore, in addition to coal, and all the many kinds of marble, slate, and other necessary commercial requirements. Let diligent search be made, and riches vast and wide will reward the adventurers.

We made allusion, in our Journal of last week, to the Geelong and Ballarat Railway Company, and pointed out its vast importance, not only in a colonial or local point of view, but as bearing on the prosperity of the mother country, by connecting, ultimately, the capitals of the two most rising provinces, Victoria and South Australia, and opening up the interior of the country, together with all the districts intermediate of the termini. It is a project which will, no doubt, meet with the warmest support of the colonists; and, indeed, it is one which they have desired and sought for. It does not, moreover, clash with existing interests, but, on the contrary, will be a powerful auxiliary and source of benefit to the only railway which is at all connected with the district—namely, the Geelong and Melbourne, and which applies only to Geelong itself, for it will be observed that it is denominated the "Geelong and Melbourne," not "Melbourne and Geelong," which would have been the case if the original project had been either for connecting the two provinces, or of giving railway communication to the gold districts above Geelong. Its origin was to connect Geelong with the capital of the colony of Victoria, nothing more. Indeed, it is altogether a Geelong enterprise; its management is in that town, its chief shareholders there reside; and, according to the printed list issued on the 1st of January last, there were only 17 shareholders in Melbourne. If a line between London and Liverpool had been proposed as a section of a line to the North and Scotland, it surely would never have entered into the head of any man to style it "The Liverpool and London Railway;" but an enterprise promoted in the former place for connecting that port with the metropolis would necessarily take that denomination. The Geelong and Melbourne is exactly analogous. This is fully confirmed by the fact, that at the meeting of the shareholders, held at Geelong on the first day of this year, the directors reported that an extension to Ballarat did not come within the provisions of their Act of Incorporation. The sixth paragraph in that document goes on to say that "The directors also received a requisition from the Geelong shareholders to convene a meeting for extending the line to Ballarat. The matter was accordingly brought forward, but as it appeared that the Act of Incorporation did not confer sufficient powers, it was decided that the proposition could not at present be carried into effect."

Here, then, is full evidence of two important points; first, that the Geelong and Melbourne have not the power of making an extension to Ballarat, and, therefore, clearly never entertained it in the original scheme; and, secondly, that the object of the Geelong and Ballarat Company is the desire of the colonists, and especially of the shareholders of the Geelong and Melbourne Company residing at Geelong.

We also showed last week that, financially, the Geelong and Melbourne Company was not in a position to undertake any extension, and had, indeed, to look to this country for the funds necessary for the completion of their line. An office for that purpose was established in London, under the agency of Mr. S. J. COOKE, and, apparently, only shortly before the meeting in question, for the opening paragraph of the report already alluded to says—"The advice received from the company's agency office in London, since the last half-yearly report, are of such a nature as to lead the directors to believe that the establishment of that office will be of considerable importance, and productive of very satisfactory results, to the company, both with regard to the execution of orders for plant, &c., and the conduct of the monetary and official requirements of the company."

The Geelong and Ballarat Railway Company is essentially an independent enterprise, "standing on its own merits," as the prospectus expresses it, and cannot possibly be construed into anything approaching antagonism to the Geelong and Melbourne. Both start, truly, from the same point, but one goes to the right, to Melbourne; and the other to the left, to Ballarat and Adelaide. It seems to us that it is one of the most important matters for the benefit and interest of all parties identified with the Geelong and Melbourne which could be proposed, and in this light, no doubt, it will be viewed by those in the colony, and the public generally in this country.

The attention of the British community is evidently turned to our Australian colonies, and wisely so, for nowhere is there a better or wider field for the employment of capital, and the development or extension of all commercial and mercantile matters which emanate from this side, and which consequently enrich the home adventurer and mother country, while they promote the best interests of our transmarine dependencies. To facilitate these operations, and with a view of running current with the growing feelings of the times, an express steam-packet company is proposed, that the passage between these countries may be shortened by expedition, and a regular and constant intercourse kept up; doing that by sea which the railways will do on land, and thus bringing the very interior of our colonies of Australia into close proximity with Great Britain.

ACCIDENTS IN COLLIERIES—INSPECTORS' REPORTS.

The official reports of the Government Inspectors of Coal Mines have just been issued, comprising a vast amount of highly interesting information from the various districts, contributed by Messrs. Matthias Dunn, J. J. Atkinson, Joseph Dickinson, Peter Higson, Charles Morton, James Hedley, Thomas Wynne, Lionel Brough, Herbert Mackworth, Thomas Evans, Robert Williams, and William Alexander. In Durham, Northumberland, and Cumberland (Matthias Dunn), the accidents during the half-year ending Dec. 31, 1855, were—in shaft, 18; from explosions, 11; falls of stone and coal, 27; sundries, 23=79. Since the Act came into operation in 1850, the total number of accidents have been—In shafts, 126; from explosions, 134; choke damp, 6; falls of stone and coal, 234; sundries, 230=741. The averages for the period of six months have been—In shaft, 13; from explosions, 14½; choke damp, ½; falls of stone and coal, 23; sundries, 23=74. Mr. Dunn's paper "On Boiler Explosions," read before the North of England Mining Institute, and a résumé of the several inquiries held during the six months, are added to the report. Mr. J. J. Atkinson was appointed so nearly the end of the year, that Mr. Dunn included the whole district (which is now divided between Mr. Atkinson and himself) in one paper.

Mr. Joseph Dickinson (Lancashire, Cheshire, and North Wales) states that in the number of lives lost the diminution, as compared with the preceding year, is 100, and in separate accidents, 13. In particularising some of the principal accidents, he might premise that explosions of fire-damp seemed unusually numerous during the long frost at the commencement of the year. Ventilation is usually brisker in cold weather, but in frost and east winds the air apparently possesses peculiar properties, as instanced in its effect upon health, in glass, bones, &c., becoming more brittle, and in fires burning more vividly, as though the molecular arrangement of the air were different. So fire-damp at such times certainly ignites with less than usual warning. The report for Mr. Peter Higson's district is included in that of Mr. Dickinson, in consequence of the late date at which the district was divided.

Mr. Chas. Morton (York, Derby, Nottingham, Leicester, and War-

wick) reports that during the half-year ending Dec. 31 the number of accidents was 57, causing 62 deaths. The causes were—Explosions of fire-damp and suffocation, 10; falling down shaft, 10; struck with falling substances in shaft, 5; crushed in or at the bottom of shaft, 4; roof falling in interior of mine, 11; coal falling in interior of mine, 13; run over or crushed by corves in the interior of mine, 4; ropes and chains breaking, 2; boilers bursting, and machinery, 3=32. Mr. John Hedley's report, dated from Bristol, for the counties of Derby, Nottingham, Warwick, and Leicester, states that from Nov. 20 (the date of his appointment) to Dec. 31, the deaths were—from falls of roof and coal, 3; in shafts, 3; and above ground 2=8.

Mr. Thomas Wynne (Staffordshire, Worcestershire, and Shropshire) shows that during the last six months of 1855 the deaths were—from explosion of fire-damp, 17; falls of coal and roof, 55; falling down shafts, and falling substances in shafts, 30; sundries, 9=111. The accidents during the year were—from explosions of fire-damp, 38; falls of coal and roof, 116; falling down shafts and falling substances in shafts, 20; miscellaneous causes, 24=227. Mr. Lionel Brough's report is included in that of Mr. Wynne.

Mr. Herbert Mackworth reports deaths to have occurred from explosions, 7; falls of roof, 60; in shafts, 31; miscellaneous, 14; above ground, 3=201. Mr. Evans's report is comparatively uninteresting, from his having received his appointment at the end of November only.

Mr. Williams's (Scotland) report shows the number of lives lost during the half-year ending Dec. 31 to have been—from explosions, 7; falls of roof, 19; in shafts, 26; miscellaneous, 16=58, against 37 for the preceding half-year. Mr. Alexander having been but 27 days in office at the end of the year, his district is included in the report of Mr. Williams.

Each of the reports are of a very elaborate character as regards the established inspectors, but those recently appointed have in most instances adopted the very proper course of allowing the former inspector to carry his report to the end of the year 1855. The new ones having held office but 40 days at most, could have little interesting matter to communicate, whilst by the course adopted the half-year's report is not mutilated. We shall enter fully into detail, referring to each district reported upon, in future Journals.

THE MINING AND INDUSTRIAL INTERESTS OF CORNWALL.

[FROM OUR CORRESPONDENT IN WEST CORNWALL.]

OCT. 9.—Though the mining market is not very active, it wears an improved aspect, in consequence of the favourable position of the copper standard. At the beginning of July last, the prospects of copper mining were very gloomy; now those prospects have vastly improved, and the tin mines are also in good circumstances, for black tin continues to maintain high prices. Seldom have Cornish mines presented better opportunities for investments; as, in consequence of the depressed times mining has passed through, the shares in a great many mines of promising character are now unusually low. It is highly probable that the prices of such shares will advance, especially in the case of good progressive mines, which are increasing their sales at the ticketings, and are likely to be in the Dividend List in 1857. To watch and compare the sales at the ticketings is a very practical and common-sense operation, which some mining adventurers carry out, but which others neglect.

Wheal Bassett bi-monthly meeting took place on Tuesday, when this mine paid its 81st dividend. The profit on the two months' working was 3915s., and a dividend of 8s. per share (4096s.) was declared. The balance in hand was, of course, diminished, and, taking into account a loss of 179s. on working the south mine, the reduction of balance was 1000s. to 640s. This serious reduction is thus accounted for in the agents' report:—"The two months' ores credited in the present statement sold at a very low standard, and made from 1000s. to 1200s. below their real value, and this will account for the small amount of credits." The ores referred to by the agents were sold on July 3 and 31, just about the period when the standard reached its lowest ebb since the beginning of the year. The agents declare their conviction that the ores then sold made from 1000s. to 1200s. below their real value. Can anything, then, be more extraordinary than that the agents and adventurers of large and productive copper mines should submit to sell their ores at so heavy an amount below their real value, when, if they would combine together, and exercise some degree of enterprise and energy, the large mines might erect works and smelt their own ores. If they do not, they may rely upon it that, so long as the smelters' monopoly is continued, so long will the Wheal Bassett and other adventures be liable to sell their ores below their real value. It appears, however, with regard to Wheal Bassett, that the next account is likely to stand in a better position. The smelters, after throwing down the standard to such a most serious extent, have agreed, for reasons best known to themselves, to give a better price; though how long that shall last it is for the monopolists alone to say. The consequence, however, of the present improvement is, that the agents of Wheal Bassett are enabled to state that their "credits for the next account will be 2000s. more than the present; and, though their costs will be higher, they shall add several hundreds of pounds to the balance in hand." South Wheal Frances continues to look exceedingly well, and to have all the appearances of a lasting and highly productive property; the shares, however, have a little declined, the price at present being about 350s. At Wheal Bassett, they are driving cross-cuts at three different levels towards the lode which is so productive at South Frances. Wheal Buller continues to look very favourable for a course of ore in the eastern shaft. The adjacent mine, Copper Hill, is reported to have greatly improved, and shares are firmly held; and in East Basset the shareholders are sanguine of good results in a short time. Great Alfred shares have somewhat declined; the mine, however, continues to open well in the 160 and 170 levels. Alfred Consols is very productive east of Davey's shaft, and prices are firm. Shares have changed hands in Great South Tolgus at 11s.; some very good ore ground is being laid open in this mine. South Tolgus is working at a profit, and will soon appear in the Dividend List. Grambler and St. Aubyn is in an improving state, with very good prospects in view, and is a mine well deserving of attention. In Rosewarne Mine, shares have changed hands at about 70s.; from the progress and indications of the workings, an improvement is expected. A good opinion is entertained of West Rosewarne, where an engine has lately been set to work. At the Great Wheal Busy Mine a considerable amount of necessary work has been done, to prepare for operations on a large scale; in the neighbourhood of Chacewater very sanguine expectations are entertained of the results. At South Seton, a call of 1s. per share has been made; very little can be done in this mine until an engine is erected; the lode has favourable indications of a course of ore at greater depth. At South Garrow three-monthly account there was a balance in hand of about 130s.

The Cornwall Mining School was re-opened at Truro on Oct. 1, with an accession of pupils. Although the great body of the mine agents do not believe the school will be of much practical value, it must be admitted that the instruction given therein will be a very good foundation for the subsequent pursuit of engineering or practical mining. In connection with the school it is intended to form a collection of miners' tools, models of machines, samples of materials, and everything in use in Cornish mines, or which it may be thought desirable to introduce therein.

One of the teachers of the school stated at the Polytechnic meeting that some gentlemen had kindly offered to assist in forming a collection of mining articles and implements for the use of the school, and that no doubt manufacturers would send articles for the same object. The Messrs. Harvey, of Hayle Foundry, are engaged in manufacturing a highly-finished working model of a steam-engine, of about 1-horse power, for the use of the school. This model of the Cornish pumping engine is to be constructed on the best principles; and the Messrs. Harvey, with great liberality, will present it to the Mining School gratuitously. The engine, which is now nearly finished, will of course be of great advantage in giving descriptions of the steam-engine. But with all the advantages of this kind which can be accumulated, there must still be the practical work in the mine required to make a good and practical mine agent. This view, indeed, is insisted upon in the school itself. The master of the mining department of the school stated at the Polytechnic meeting, "that he had always endeavoured to impress on the minds of the pupils that they can never hope to become accomplished miners in the class-room; that, however much they seem to understand there, to make their knowledge really valuable they must reduce it to practice in the mine." No doubt this is the correct view of the case; and it is the belief that the young students of the Mining School will not afterwards give themselves to working underground, which makes the mine agents doubt the practical utility of the institution. They are generally more in favour of the establishment of schools or evening classes in the mining districts, at which intelligent

lode in the Bachelidon Mountain, upon which the company resolved to devote all their energies. The productiveness of the Bachelidon Mountain since that time has been fully developed by driving levels, intersecting the lode at 20, 40, 50, and 70 fms. depth. The mine from that time has been nearly self-supporting (notwithstanding the large amount expended in driving the levels, and opening the ground for future operations) during the progress of the work. Since that period the Bachelidon Mine has produced 1016 tons of ore, which have realised 14,426*l.* net, after deducting freight and charges, the whole of which has been spent in developing the mine, except two dividends declared in May and July last, amounting to 7*s.* per share. The mine is producing a regular supply of ore, and the dividends are expected to become regular every two-monthly meeting, as all dead outlay has ceased, and a large store of ore is stated to be opened for working. A shaft has been sunk from surface to the 70 fm. level, and through this shaft all the ore from the different levels is conveyed to the crushing-mill, saving a great expense, instead of raising ore by water or steam-power through shafts, &c.

ROSEWARNE UNITED is looking very promising, and although the returns have fallen off, the costs have also been greatly diminished. In the first nine months of this year the sum of 5120*l.*, or 10*s.* per share, has been divided, making a total sum of 13,956*l.*, or 2*s.* 10*d.* per share, since the commencement of dividends in March, 1855; during which time, also, there has been a heavy outlay for powerful new machinery and extensive surface works. The dividend on Oct. 13 will probably be 1024*l.* (2*s.* per share). The next few months will likely see some valuable discoveries made. The 40 west is within 6 or 7 fms. of being under the dip of the rich course of ore in the level above, and the 31 west is within 12 or 15 fms. of being under the course of ore in the 32 west of Richard's engine-shaft. The 35 west has improved, and is reported to be worth 25*s.* per fm. The stopes and pitches are looking well, and yielding a fair quantity of ore. The price of the shares is about 70*s.* per 100.

SOUTH WHEAL FRANCES continues very productive. The 134 fm. level west has lately improved, and is now worth 3 tons of ore per fm.; the 114, 2 tons; the 94, 2 tons; the 50, 3½ tons; and the 40, 3½ tons per fm., all going west. A level is commenced in the 124 west on the part of the lode corresponding with the 134, which has just passed through the cross-course, and is producing stones of yellow copper ore, which will probably improve in value ere long. Ore at this depth is an important feature, as it is not long since it was remarked that "little or no ore would be found under the 90 or 100 fm. level." The amount of dividends paid in the first nine months of this year has been 21,821*l.*, or 4*s.* 4*d.* per share, making a total sum paid of 99,386*l.*, or 20*s.* 6*d.* per share. The price of the shares is 36*s.* per 100.

SOUTH TAMAR CONSOLS has been entirely removed from the list of mines at work, by the very unfortunate accident which took place at the end of August, when the river Tamar broke into it, and so destroyed the property as to leave no inducement to attempt to drain it again, at all events, as a commercial speculation. The mine paid two dividends of 5*s.* each this year, amounting to 4300*l.*, making a total sum paid of 31,560*l.*

UNITED MINES are looking very well in the eastern part, but generally comparatively poor, while the cost of drainage is great. There has lately been a run in Taylor's shaft, which will be expensive to repair, and there is no immediate prospect of a dividend.

WEST CARBON is stated to be gradually returning to a position as to finances when dividend may properly be paid. It is said that the balance in favour of the adventurers, per cost book, has increased to upwards of 2000*l.* in the past six or eight months, but as this includes ore sold, the money for which is not payable for two months after sale, it is necessary, at the same time, to have advances from the bankers to meet the costs, so that dividends will have to be a little further deferred, until this system can be dispensed with. It is also said that the usual reserves are kept up. During the past quarter, 1852 tons of copper ore have been sold for 8100*l.* 2*s.* 2*d.*, making the total sales of ore amount to 14,727*l.* 18*s.* The total dividends have been 71,488*l.* The present price of the shares is about 135*s.*

WEST DANIEL has much improved lately. The south lode at south shaft, below the 80, is worth 6 tons of copper ore per fm.; the 80 west, 4 tons; the 80 east, 2 tons; the 70 west, 3 tons; and the 70 and 80 east, on north lode, 2 tons per fathom. The returns have been increasing for some time. The price of the shares is about 160*s.* per 100.

WHEAL BASSET continues much the same as for some time past, although the returns are not at present so productive, yet the stopes and pitches are looking well, and they are daily expecting to cut the lode now so profitable in South Wheal Frances. The number of lodes being worked on in this mine is an important feature, and affords more than usual opportunities for discoveries, and tends to give the property a character of permanency. The sum of 25,900*l.*, or 4*s.* 4*d.* per share, has been divided in the first nine months of this year, making a total sum paid of 212,480*l.*, or 43*s.* 6*d.* per share. In October, 5*s.* more will be divided. The present price of the shares is about 50*s.* per 100.

WHEAL BULLER.—In last Review it was stated that the returns of this mine had fallen off, and that the reserves had been reduced. This retrogression has continued, the sales of ore in the past quarter having been 1635 tons for 7281*l.* 7*s.* 6*d.*, against 1975 tons for 10,142*l.* 16*s.* in the previous quarter, and 2279 tons for 14,841*l.* 17*s.* in the quarter ending March 31. Five dividends, amounting to a total of 21,760*l.*, or 8*s.* 3*d.* per share, have been paid in the first nine months of this year, three of 20*s.* each, one of 15*s.*, and then one of 10*s.*; the next will probably be still less. The sales of ore are now about one-half what they were at the beginning of the year. It is too frequently the case that when a mine is very rich the great object appears to be to divide as large a profit as possible at once, without any regard to laying out works, and carrying out operations, for the purpose of providing future returns, when the existing discoveries may be exhausted. In 1854, this mine was very rich, and paid 2100*l.* per share in dividends, which raised the shares to a very high price; but in 1855 only 1300*l.* was paid, and in 1856 it will probably be less than 1000*l.* A system of managing a good investment, and it is to be regretted that more of the commercial element is not introduced into the working of mines. The 60 east is yielding 5 tons of ore per fm.; the 60 east, on north part, 2 tons; and Kist's shaft, sinking below the 28, 3 tons per fm. All other parts of the mine are poor. The eastern part of the mine is expected to turn out well, when properly developed, but had a small proportion of the profits divided been applied in time, these works would now have been further advanced. The shares have fallen in the past three months from 425*s.* to 250*s.* per 100. The total sum divided from the commencement has been 212,500*l.*, or 85*s.* 6*d.* per share.

WHEAL CLIFFORD, adjoining the United Mines on the east, is very productive in the bottom levels (160 and 170). The monthly sales of ore have nearly doubled since the beginning of the year. Shares are quoted 500*s.* per 100, and upwards, which is yet, perhaps, high enough for them. The sum of 1500*l.*, or 6*s.* per share, has been paid this year.

WHEAL OWLES is situated in the parish of St. Just, in Penwith, and is divided into 80 shares, 75*s.* or 80*s.* per share paid. It is bounded on the north and west by Botallack, and on the south by Boscawen. The set is extensive, and comprises Wheal Bays, Wheal Owles, Parkoweth, Wheal Geniall, and Wheal Edward. The lodes are numerous and productive, the present returns of tin being about 18 tons monthly. The profit on the last quarter's working was about 3500*l.* The mine is generally considered a good investment, and it is likely to pay dividends for a considerable period. The machinery consists of three pumping engines of 36 and 24-inch cylinders, three winding engines, and one 30-inch cylinder stamping engine, to which is attached 64 heads. The shares are held in few hands, and the present price is about 260*s.* to 270*s.*

WHEAL WREY CONSOLS LEAD MINE is doing very well. In little more than 18 months there has been divided the sum of 7575*l.*, or 1*s.* 17*s.* per share in the first nine months of this year, 492*s.*, or 21*s.* per share. The shaft is down upwards of 50 fathoms, and the lode is still very productive, with every prospect of a continuance. The shares are about 5*s.* 10*s.* to 9*s.* per 100.

PROGRESSIVE MINES.

ABBEY CONSOLS LEAD MINE was formerly called the Bronhorlan, and is situated in the central part of Cardiganshire, between the rivers Teify and Ystwyth, and close to the ruins of the Abbey of Strata Florida. The lease of the mine was purchased about 12 months ago, and since then machinery has been erected, the old works extended, and upwards of 100 fathoms of lead ore ground laid open in the adit level, with a lode very similar to the Eglwys. There are 6000 shares, with 9*s.* 4*d.* per share paid up. The cost up to the present time has been 28916*l.* 14*s.* 5*d.* The sales of lead ore have amounted to 38 tons—157*s.* 7*s.* 5*d.*, and it is expected that the returns for the future will be about 20 tons per month; 45 tons will be sampled on Oct. 11.

BALLESWIDEN TIN MINE is situated in the parish of St. Just, in Penwith, Cornwall, and is divided into 1624 shares, with about 10*s.* per share paid. The operations were commenced by the present company in 1832. The depth is about 120 fathoms. The present returns are about 20 tons of black tin monthly, and the expenditure is about 1600*l.*, but the mine has been burdened with a heavy debt for some time. The surplus for the quarter ending June last, of 433*s.*, reduced the debt to 460*l.*, which it is expected may be cleared off at the next meeting, on Nov. 4. A little above 16,000*l.* has been paid in dividends. The machinery comprises a 45-hp. pumping engine, a 30-hp. stamping ditto, to which is attached 96 heads of stamps, and three drawing engines of 16-hp. cylinder each. The prospects of the mine continue much the same for some time, and the shares are quoted at about 5*s.* to 6*s.* Arrangements are now being made to light the mine with gas underground.

BERRIOW CONSOLS MINE is situated in the parish of North Hill, Cornwall, and is divided into 250 shares, upon which the sum of 2697*l.* 5*s.* is paid-up. The mine is on the eastern slope of the Caradon Hills, two miles north of Wheal Phoenix. A water-wheel has just been erected and set to work, and they are sinking on a gossan lode, containing some black and yellow copper ore.

CARVATH UNITED is opening out in the 30, and the lode improving in each end. This young mine has sold about 2600*l.* worth of tin and copper in the last sixteen months.

CLIFTHAM AND WESTWORTH.—The engine-shaft is sunk 10 fms. below the 60 fm. level. The 60 west, on Wentworth lode, is worth for tin 35*s.* per fm. This lode is large, and likely to be more productive at a greater depth. The shares are quoted about 12*s.* or 13*s.*

COLLAHOMME COPPER MINE continues in a very promising state, and has commenced sampling monthly about 150 tons of copper ore. In the past quarter, 549 tons of ore (four months' workings) have been sold for 3299*l.* 8*s.* 6*d.* The engine-shaft is now down about 75 fms. The price of the shares is about 50*s.* per 100.

COPPER HILL.—The 80 west, level of engine-shaft, is large, and producing stones of ore. In the 70 west the lode is 3 ft. wide—gossan, and stones of copper ore.

CRADDOCK MOOR COPPER MINE is situated in the parish of St. Cleer, Cornwall, and is divided into 1555 shares, the amount of 14,537*l.* 9*s.* being paid-up. The sales in the past quarter have been 232 tons, for 2634*l.* 9*s.* 4*d.* The returns rather exceed the costs, although the extent of ground yet laid open is small. Independent of the ends and pitches working, the bunches of ore passed through are estimated at 500 tons. This mine is not yet much deeper than the adit of West Caradon, adjoining, in which the mine ore on the same lode is found to hold down more than 100 fms. under adit. The shares are about 45*s.* to 50*s.* each.

CURBERT UNITED LEAD MINE is said to improve at each successive level; the lode at one point in the bottom level is valued at 1 ton per fm. It is believed that the lode in the valley, going towards the old workings of Mexico Mine, likewise holds out good prospects. With the view of proving this, the 65 fm. level is being vigorously prosecuted, and has gradually improved, being now valued at 2 cwt. of ore per fm., with signs of being better.

CWM SEBON LEAD MINE.—This mine is in the rich lead district of Cardiganshire, and adjoins East Daren, which has paid 1500*l.* in dividends in the past quarter. The new 60-ft. water-wheel, for pumping, will probably be at work within two months from this date, soon after which the reports will, no doubt, be very satisfactory.

ore, which fetches 17*s.* to 21*s.* per ton; and as there is a long run of productive lode in the bottom level (the 60), it is reasonable to expect that in sinking to deeper levels rich ore ground will be discovered, and a very profitable mine laid open. It is intended to have a special meeting shortly, to consider the propriety of placing the mine under the new Limited Liability Act, when the shares will probably be retained at 600*s.*, and limited to 4*s.* each, crediting the amount already paid.

THE DYPWNOG MINES are situated in the parish of Penegoes, county of Montgomery, about nine miles from Machynieth, on the road to Llanidloes; they are close to the celebrated Dolfe Mine, being the adjoining set; they were worked by a Welsh company, but in consequence of the failure of one of the principal proprietors they were sold. The present company was formed in 1848, and consists of 3000 shares. The capital, paid up, amounts to 11*l.* 1*s.* 6*d.* per share. These mines have hitherto paid no dividend, notwithstanding they have produced, since 1848, 931 tons of ore, that has realised net 12,150*l.*, the whole produce having been laid out in opening levels, &c. These mines are now down to a 70 fm. depth, having levels every 10 fms., from the 20 to the 70. The shareholders, about a year and a half since, finding so much time was lost in consequence of the want of water-power—in summer by drought, and in winter by frost—resolved to erect steam-power, to be used when the water-power failed, and this steam-power has now been completed, and has been occasionally worked during the last four months, so that the mines have been regularly in operation during the whole summer, notwithstanding the unprecedented dry season. The 30, 40, 50, and 60 fm. levels have regularly improved in the richness of the lode as they have gone down; the value of the ground in the 60 being double that of the 20. The 70 has not yet intersected the lode, but is expected to do so in about another month's driving. The quality of the ore from this mine commands as high a price as any lead ore is likely to fetch at Holywell sales that has no silver in it. The last ticketing (Sept. 11) was 14*l.* 0*s.* 6*d.* per ton. The great Escannel lode runs through this set, but has not yet been opened upon. The mine is held under a lease, of which about 40 years is yet unexpired, at a low royalty.

EAST GARRAS.—The main lode has just been cut, and looks very promising; with a very small outlay, important discoveries may be made in driving on its course, as high backs will thus be gained. The price of the shares is 15*s.* to 20*s.* per 100.

EAST TOLGUS is progressing favourably, with every chance of improving. The adit on the North Buller lode is worth 20*s.* per fm. The shares lately rose to 70*s.*, but are now about 50*s.* per 100.

EAST WHEAL BASSET.—The engine-shaft is 4½ fms. under the 70, and is still in clay. The lode in the 60, on Copper Hill lode, is 4 ft. wide, producing stones of copper ore. The quality of the ore from this mine commands as high a price as any lead ore is likely to fetch at Holywell sales that has no silver in it. The mine is looking better than for some time past. The price of the shares is 40*s.* to 45*s.* per 100.

EAST WHEAL BULLER.—They are driving the 20 and 40 west on south lode, which is at present poor. The mine is considered a fair speculation at low price.

EAST WHEAL PALMOUTH LEAD MINE, near Truro, is a promising speculation. The engine-shaft is sunk 20 fms., at which depth the lode will soon be cut. The 10 is driven about 30 fms., 20 fms. of which are through a good lode of silver lead ore—a great deal better in the bottom than in the backs. The lode in this end is now valued at ¾ of a ton per fm. The mine is in 2018 shares, 2*s.* per share paid, and the price about 4*s.* 10*s.* to 4*s.*

EAST WHEAL TREFUSIS.—They are sinking the engine-shaft, which is down 7 fms. under adit, in a lode 3 ft. wide, composed of a fine gossan, with occasional stones of copper ore. The price of the shares is about 3*s.* to 4*s.* per 100.

GOGINAN LEAD MINE, situated in the parish of Llanbadarnfawr, Cardiganshire, and is divided into 2000 shares. The original capital subscribed was only 500*l.*, on which the mine made a profit of 45,000*l.* from the produce of one lode, which was worked to the depth of 120 fms. or 60 fms. below the adit level. This lode being poor in the bottom, additional capital, to the extent of 11,000*l.*, has been subscribed during the last two or three years, and extensive operations carried out, by which two large additional lodes of great promise have been discovered, and towards which cross-cuts are being driven opposite to the productive part of the old lode, by which cross-cuts the two new lodes will shortly be cut, and explored more than 100 fms. from the top of the hill, and where discoveries of importance may reasonably be expected. Good prospects of success are also opening in the western part of the mine, as well as eastward, where a level being carried forward into the dip of the ore ground from Welsh Consols old mine, which level will be more than 100 fms. deep when it reaches the boundary of that mine. Goginan Mine is abundantly supplied with water for all purposes, hence no steam power is required.

GONAMENA COPPER MINE is in the parish of St. Cleer, Cornwall, and is divided into 1028 shares, on which the sum of 18,176*l.* has been paid up. In the past quarter 255 tons of copper ore have been sold for 2325*l.* The sales of ore, which already exceed the costs, are likely to be increased. The depth is 90 fms. under adit. The price of the shares is about 25*s.* or 26*s.*

GRAMBLER AND ST. AUBYN.—Although the progress made is somewhat slower than expected, yet the position and prospects of the mine are very satisfactory. The 20 and 40 west on the 130 fm. level, and the 15, are valued together at 100*s.* per fathom. At the meeting to be held on Oct. 14, the account will show a small balance against the mine, but it is understood that no call need be made, as the sampling of ore to take place on the 13th is estimated to realise 1000*l.*, which will entirely wipe off this balance. Although the lodes are not large, they make up in quality. The principal lode is called "Williams's," and is expected to be cut in a level 12 fms. deeper in a few weeks. The gossan at this mine is as fine as any in Cornwall. It is reasonable to expect that the mine will be in a dividend state early next year; it is, therefore, an excellent investment. There are only 213 shares, and the price is from 80*s.* to 85*s.*

GREAT POLGROVE TIN MINE.—The upheaving of the elvan in the 116 having again disordered the St. Martin's lode, it has become doubtful whether the prospects will warrant the adventurers providing funds for further trial. Capt. Charles Thomas, who inspected the mine very recently, strongly recommends the driving of the 116 and the 126 eastward, towards the slide, so as to give the mine a full trial before abandonment.

GREAT SOUTH TOLGUS continues in a very improving state. The lode in the 70 west is producing 6 tons of copper ore per fm., and in the 70 west below the 60, 5 tons per fm. All the levels west of the new engine-shaft are now well ventilated, and driving on them was at once commenced. The sales of copper ore this year have been as follows:—In February, 78 tons, for 4534*l.* 3*s.*; in April, 100 tons, for 635*l.* 12*s.*; in June, 145 tons, for 1052*l.* 16*s.* 6*d.*; and in August, 219 tons, for 1438*l.* 6*s.*; while 215 tons are sold this week. A new steam-engine, with crusher and hauling machine attached, have just been erected, and the returns will be still further increased considerably. The mine is rapidly approaching to a state to pay dividends regularly, and is one of the safest investments that can be made. The price of the shares is about 12*s.* per 100, but difficult to be obtained.

GREAT WEST SORTIDGE.—The engine-shaft has now been sunk more than 30 fms., and the lode in the same is very promising, containing fine capels, and rich copper ore occasionally.

GREAT WHEAL ALFRED COPPER.—Some very important discoveries have been made in the past quarter. The following report, from Capt. William Martin, will be interesting, particularly as being written by an independent agent, unconnected with the mine:—

"In compliance with your request, I have been underground to-day (September 29), and made a careful inspection of the mine, and beg to hand you this as my report. The 180 fm. level is extended east of Painter's shaft 24 fathoms; the lode is divided into branches of quartz, blue killas, and floukan, having produced stones of ore, but not to value: it is my opinion there is no great chance of finding much ore in this level in that direction: the 180 fm. level is extended west of Painter's shaft 37 fathoms; the first 15 fms. of which the lode is from 2 to 4 feet wide, yielding stones of ore occasionally, the last 7 or 8 fms. has been a good lode, and behind the end the lode has made a splice, and is now much improved, worth about 12*s.* per fm.; the ore discovered in the back of this level to the present end is about 900*l.* worth; there is now from end to Copper-house shaft 32 fms., and which I consider is a very valuable piece of ground. The mine sinking in bottom of the 170 is about 10 fms. west of the 180 end, it is now down 4 fms., sinking on the floukan part of the lode: there is a branch of rich ore in the eastern end of the 170 5 inches wide; the main part of the lode is standing, and will take down when the 170 is down 4 fms. to 4 feet wide, yielding stones of ore occasionally, the last 7 or 8 fms. has been a good lode, and behind the end the lode has made a splice, and is now much improved, worth about 12*s.* per fm.; the ore discovered in the back of this level to the present end is about 900*l.* worth; there is now from end to Copper-house shaft 32 fms., and which I consider is a very valuable piece of ground. 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is promising. A parcel of copper ore (42 tons) has just been sold for 213s., and the mine is occasionally sold. The mine is in 512 shares, and is considered a promising speculation. The price is about 10s. per share.

WHEAL TREBARTHAN is at present poor.

WHEAL MARGERY COPPER AND TIN is in the parish of St. Ives, Cornwall, and is divided into 312 shares, on which 17s. per share has been paid, amounting to £5304. It is on the border of the parish of Lelant, and the sett adjoins the Lelant Mines. The total amount of copper ore sold has been 536 tons 14 cwt., for 3101s. 1s. 4d., and tin 12 tons 11 cwt., for 781s. 7s. 2d. The balance in favour of shareholders at the last meeting was 316s. 15s. 8d. There is on the mine a good 40-in. pumping-engine, and they are at present erecting a new steam winn and crusher, at a cost of 1200s. to 1400s., and which may be met by the profits of the mine. The prospects are most promising, and improve in depth. The eastern shaft is now being sunk under the 50, and yields about 4 tons of copper ore per fm., and is improving. The ends are being extended east and west with all vigour, and opening out good copper ground. The mine will, no doubt, hold an important position in the spring. The shares are about 37s. 10s., and a good investment.

WHEAL POLLARD is in the parish of St. Cleer, Cornwall, and is in 3900 shares. The engine-shaft is 30 fms. under adit; branches of copper ore are met with from the shaft northward, in which direction, and near the shaft, are two of Cradock Moor lodes. When the shaft is down to the 35 a cross-cut is to be driven to intersect these lodes, which appear to be of the same nature as those of West-Caradon.

WILLOW BANK LEAD MINE is in the rich district of Cardiganshire. The operations are progressing satisfactorily, with every chance of ultimate success. The company will probably be brought under the Limited Liability Act.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

MINE MANAGEMENT—WEIGHING MACHINES.—Allow me to suggest to the managers of mines, through the medium of your valuable Journal, the great necessity there is of having weighing machines at mines. Not long since a wagon load of coal was weighed at a mine not far from Tavistock; the way bill was delivered as 2 tons, but the load scarcely weighed 36 cwt., nor could the wagon be made to contain more; this had been carried on for months. At the same mine, a quantity of coals were also weighed, and were found deficient. Had there been a weighing machine on the mine, it could have been weighed in a few moments, and dishonesty easily detected. I am certain the cost of those machines would be soon saved. —W. L.

BRIDESTOWE AND OKEHAMPTON MINING DISTRICTS.—Since the remarks addressed to you by "R. L." some time since, on these districts, some progress has been made at Okehampton Consols, in the Okehampton district, which reflects, in my opinion, much credit on the proprietors of that mine, they having commenced operations in a proper mining-like manner, by erecting a powerful water-wheel, 49 ft. diameter, and 8 ft. wide, capable of draining the mine to a considerable depth. Indeed, the facilities for carrying on the Okehampton Consols are very great, having a large river running through the centre of the sett, with sufficient water and levels remaining for the erection of whatever machinery may be required, not only for pumping, but also for drawing, crushing, dressing, &c.; and I do hope the adventurers will reap the reward they appear to be so well worthy of, for their spirited beginning in this hitherto neglected but highly promising mining district. The commencement of their operations was by driving an adit level on the course of the lode for about 50 fms. in length, throughout which the lode will average 10 ft. wide, and being composed of very fine gossan, quartz, manganite, &c., led to the erection of the machinery just alluded to. An engine-shaft of sufficient size to admit of drawing and hauling of coal from the bottom workings is in course of sinking, and is already down about 12 fms., and will, of course, be extended as far as possible to a depth of 20 fms. in cross-cutting to the lode, the indications of which hold out so much promise of success. At LYDPORT CONSOLS, in the Bridestowe district, the adventurers have sunk an engine-shaft 25 fms. below the adit level; they have cut through the lode at this depth, and found it to be of good size, composed of quartz, manganite, prill, and good spots of lead ore, but have not thought proper to further prosecute the lode, because the underground water has increased so much (a first-rate indication) as to over-power the water engine in a rainy season; and they have not sufficient inclination to erect a steam engine to properly try this, as also an engine, about 25 fms. from the first-named one, and from which a wood parcel of lead ore was sold from the adit level only. If the LYDPORT CONSOLS adventurers were to erect a powerful steam engine, it would effectually try the eastern, western, and intermediate lodes, and from the ready work now to be seen lying on the surface, together with the very promising appearances of the lodes where seen at so shallow a depth, no other conclusion can be arrived at than that a vigorous prosecution of this extensive sett would be attended with the most happy results. The present wheel would, no doubt, enable them to sink the 25 fms. level through the lode, and the probability is it would be the salvation of the concern. Such temporary trials as just stated never have been, nor will be, attended with success, except in a few solitary instances, such as the BROS GREAT CONSOLS, &c. —R. L.

TREVAUN UNITED.—The shaft at this mine is being sunk through improving ground, the lode being of a better quality in depth. A case of stone from the lode, containing rich ores of galena, is to be seen at the office of Mr. Jeffrey, Cannon House, Queen-street. The lead, according to assay, has yielded 75 per cent., and silver at the rate of 48 ozs. to the ton.

WHEAL ZION.—The new discovery holds good, and the men have returned their pitch at 26. 6d. in 12 sterling, thereby showing their confidence in the durability of the richness of the lode. A large box of rich ore from the pitch is to be seen at the office, Cannon House.

ABBEY CONSOLS (LEAD), CARDIGANSHIRE.—This mine, the first on the list of English progressive mines, is situated near the source of the river Teify, about two miles to the west of Teify Lakes. These lakes are in a mountainous district, the continuation of the Snowdon range, and to the westward of their ridge are found all the famous mines of the Cardiganshire district. We have no certain account of the discovery of Abbey Consols Mine, formerly called Bromerlian, but, no doubt, was discovered at a very early period. Some ten years ago an attempt was made to work the mine, and the old works, but this was abandoned, and it was left until about 12 months ago, when we undertook to work it effectively. The old machinery was repaired, and new added; the old levels were continued; and since then 10 fms. of ore ground have been laid open in the adit level, which is now approaching the verge of the old mine. It is a very uncommon thing in a mine so young as this for the returns to meet the cost of engineering at the surface and underground, but such is the fact—this mine is selling at 18 to 20 tons of lead a month, value about 2000s., while the expenses are under that amount, and the floor of the adit for 10 fms. shows a course of lead ore that must lead to great and regular profits.

HENSOTT CONSOLS AND WHEAL FANNY, strange to say, lie idle, although the former adjoins, or nearly so, the Old Wheal Betsy lode, whose returns were many thousands tons, and where in places the lode was 5 ft. wide, solid lead.

CATHEDINE AND JANE (SILVER-LEAD AND IRON).—This extensive sett is situated in Merionethshire, and in convenient proximity to the Festiniog Railway, which passes through its centre to the flourishing harbour of Port Madoc. This mine possesses peculiar advantages of position, as it can be worked by a deep adit without machinery, and the lead lode, which during former workings returned immense quantities of ore, at a large profit, can be advantageously developed. The principal lode, however, is of iron ore, extending for 600 fathoms, and is 10 to 12 fms. in length through the sett, and varying in width from 10 to 15 ft. The quality of the ore has been ascertained to be above 50 per cent. for magnetic iron. The first steps are now being shipped, and further orders are being received from various quarters. This mine is divided into 8000 shares, on 6000 of which 10s. have been paid, and from the remaining 2000 shares 1000s. will be raised for purchase of the dues for 10 years, by agreement with the lessees; after which the dues are, 1-14th. The company will forthwith be placed under the Limited Liability Act.

GREAT WHEAL ALFRED.—From a careful inspection of this mine, I am fully convinced that the agents have not over estimated the recent discoveries. The returns of ore when the communications from the 148 to the 150, and from the 160 to the 170 are made, will materially increase, and considerable profits be the result.

GREAT EDWARD is showing evident signs of improvement.

LADY BERTHA.—The returns of ore from this mine, it is anticipated, will leave a profit on the current month's working.

GREAT WHEAL BADDERN has considerably improved during the week. At CALSTOCK CONSOLS, the recent improvements are of an important character. For the untiring energy and patience of the shareholders they are deserving of every success.

WHEAL LUDCOTT is improving, and the sales of lead, which is of good quality, will steadily increase.

WEST CRINNIS AND ROBERT UNITED MINES.—The peculiar feature of these mines is, that at about the 110 an underly junction will take place between two of the most important lodes in the sett, both of which have yielded considerable returns of rich copper ore, and it is the opinion of all competent judges that the point of junction very important results will be reached. It is under similar circumstances that the principal deposits of the neighbourhood have been discovered; and from it is remembered that the lodes run across the entire width of the properties—distance of some 500 fms.—it will be seen that the prospects are more than usually favourable, for as the lodes alluded to are parallel to each other, it is reasonable to expect a rich deposit of ore for a great many fathoms. The Regent main engine-shaft is already sunk to the 50, although but little comparatively is done on the lodes below the 10; so that the point of junction can be reached very soon after a good steam engine is erected. A 50-hp. pumping-engine, and a 24-inch winding and crushing engine, are already erected on the West Crinnis Mine, and ready for immediate operations to be commenced. The situation of the mines is undeniably being in the very heart of the St. Austell district, and either adjoining or contiguous to the following mines—the Great Crinnis, South Crinnis, South Cudra, Penryn, Penryn, and East Crinnis, &c. The company is one formed for legitimate mining, and as such deserves support. We have much pleasure in calling the attention of our readers through your valuable Journal to the fact that no time is being lost in applying for some of the remaining shares.

TRUROTH CROWN CONSOLS.—These mines, now before the public, and practically worked, prove a prize in the coming year. They are situated in the parish of Cradock, and comprise three setts, occupying an area of 400 acres, and the depth on the course of the lode is about 2200 yards. The position is all that can be required, having analogy and good mines in its favour, whilst the indications are such as to guarantee the shareholders a highly remunerative return upon their capital embarked. The mines are traversed by six well-defined lodes, one of which produced upwards of 10,000 tons of copper ore the last working, although the mine is only 47 fathoms from surface; an eleven course, and two cross-courses. The mine has been inspected by some of the leading mine agents in Cornwall, including Capt. James Crooke, Capt. F. Lloyd, and Capt. C. Thomas, of the Dolobon Mine, all of whom concur in stating it to be a valuable property, containing all the elements of success in its favour, and combining all the most favourable features of the great celebrated mines by which it is surrounded; in fact, no doubt is entertained as to the ultimate result of the undertaking, for when the necessary machinery is erected, and the mine drained, the ore already discovered will meet the expenses; and intersecting the lode at the deep level large deposits of ore will be found, so that it will be monthly dividends to the shareholders.

At HOLEWASH MINE, Edward Wenmouth was killed from the effects of an explosion of gunpowder.

Messrs. Powell and Cooke have forwarded us the following remarks upon the business of the week:—

The market has not been quite so active as for a few weeks past, still there is a fair amount of business doing in British dividend mines. The attention of the public having been directed to this class of securities for the investment of capital, steady purchasers (in some of the best mines) are continually being made, and we feel confident that, with proper care in the selection, no other property offers such advantages for an outlay of capital. For instance, the following mines are paying dividends bi-monthly and quarterly, at the rate of 12½ to 20 per cent., with the prospect of continuing them for years. An equal interest in each of them would ensure about 15 per cent., and in the great part of parties wishing to realise, there is at all times a market for good dividend mines:—West Basset, South France, South Carolina, Wheal Trowetha, Wheal Mary Ann, Alfred Consols, Par Consols, North Basset, Devon Great Consols, Sortridge Consols, Wheal Wrey, Wheal Clifford, &c. There are also mines approaching a dividend state—viz., Great South Toulgas, Cradock Moor, Gonaema, Great Wheal Alfred, Duke of Cornwall, Parkville United, &c. There are other mines in the list, both dividend and progressive, that may be equally good. From the well-known character of the management, together with the prospects of the different mines enumerated, parties seeking an investment for capital without any great risk may embark in them with some degree of confidence.

Great Wheal Alfred, notwithstanding all the depressing influence that has been brought to bear on the market, have been in good demand, closing at 11 to 11½.

Wheal Wreys still maintain the late advance.

Wheal Mary Anns and Sortridge Consols have been in good demand.

The latter mine has improved during the week, and shares have advanced to 8½, 3¼.

Wheal Zions have receded to 2 to 2½, although the discovery at the mine is of an important character, and fully warrants the present price of the shares.

We notice with pleasure the improving prospects of several mines in the Calstock district, and shall watch with interest the results. Taking into consideration the present state of financial affairs, the mining market may be considered, on the whole, to be very good, and with proper care on the part of investors and their agents, it will continue so.

Mr. John Batters has furnished the following remarks on the Commercial and Mining business of the week, ending Friday night:—

The markets continue depressed, and the fall has been considerable during the week, both in railways and the funds. On the setting day, Wednesday, Consols fell as low as 99½; yesterday and to-day a partial rally has taken place, and to-night they close 92 to 92½, for the November account. The Bank of France returns for the month show a falling off in bullion and specie of about 2,750,000s., and our own Bank returns for to-morrow are expected to be very unsatisfactory—something near 1,000,000s. decrease in the bullion. The bold step of the Bank directors, in raising the rate of discount to 6 per cent. for short dated bills, and 7 per cent. for long, it is hoped, will have the effect of stopping the issue of banknotes, and allaying this serious panic. In the foreign stock market, old Turks have been very sensitive, and on several vague rumours have fallen upwards of 5 per cent., closing to-night at 92½ to 92½, ex dividend.

Railway shares have stood remarkably well, considering the general depression, and close to-night an improvement from the lowest point of the week of 1 per cent. Birmingham, 100 to 100½; Great Western, 63½ to 63½; South-Western, 51 to 51½; Midland, 75½ to 75½; Leeds, 91½ to 91½; telegraph, 27 to 27½; Dover, 20½ to 20½; York and North-Western, 19½ to 19½; Eastern Counties, 18 to 18½; London and South-Eastern, 33½ to 33½; Northern of France, 37½ to 37½.

In banks and miscellaneous stocks, only a very limited business has been done. Subjoined are the quotations:—National Discount Company, ½ to ½ prem.; London Discount Company, ½ to ½; Omnibus Company, 3½ to 3½.

Foreign Mines have been inactive during the week, closing—United Mexican, 3½ to 3½; Coates, 2½ to 2½; Fort Bowen, 6d. to 1s. 6d.; Imperial Brazilian, 2½ to 2½; St. John del Rey, 1s. 2d. to 2s.; Cobre, 5s. to 5s. 7d.; Santiago de Cuba, 1½ to 2.

Dividend British Mines still continue in good demand, and with an improving tendency, investments to a considerable extent being made in this market during the week. Alfred Consols, 15 to 15½; Brydon Hall, 11s. to 12s.; Devon Great Consols, 40s. to 40s.; Ding Dong, 35s. to 35s.; Great South Toulgas, 11½ to 12s.; Great Wheal Vor, 2 to 2½; Mary Ann, 37 to 38s.; North Basset, 38s.; Providence, 61 to 62s.; Rosewarne, 70 to 75s.; Sortridge Consols, 31½ to 32s.; South France, 360 to 365s.; Trelawny, 21s.; Vale of Towy, 1s. to 1s. 1½; West Basset, 31 to 31½; West Providence, 20 to 21s.; Basset, 20s. to 20s.; Buller, 270 to 280s.; Wheal Kitty (Lelant), 10½ to 11s.; Wheal Uny, 8½ to 9s.; Progressive Mines are also in good demand, with a large business doing. Belling Well, 6 to 7s.; Cliffland and Wentworth, 11 to 12s.; Daren, 4½s.; Devon Burra Burra, 2½ to 3s.; East Basset, 42½ to 43s.; East Bove, 10 to 12s.; Great Wheal Alfred, 10½ to 11s.; Harvard United, 45s.; West Wheal Bolton, 55s.; West Collascombe, 1½.

ROYAL BRITISH BANK.—Mr. James Wyld stated, at a meeting of the Royal British Bank depositors, that Mr. Coleman had valued the assets of the bank at £428,644 8 0.

The estimated value of the estate of the late Mr. Coleman	£428,644 8 0
The call made by the directors amounted to	150,000 0 0
Total value of assets	£478,644 8 11
The liabilities of the bank are	£239,131 12 9
Estimated assets	478,644 8 11
Total	£60,487 3 10
Estimated law cost	4,000 0 0
Total	£64,487 3 10

Including, therefore, the last call, there is a deficiency of 64,487s. 3s. 10d. A call of 30s. per share, in addition to the 50s. (making 80s. per share), will be required as a contribution from the shareholders to pay the liabilities of the bank.

The iron-works of the Royal British Bank are situated in Llynvi Valley, Glamorganshire, about five miles from the town of Bridgend. The Llynvi Valley Railway connects the works with the little harbour of Portlough, distant about six miles, and a short line of rails branching from the same railway brings them into communication with the South Wales Railway at Stoney, three or four miles below Bridgend. The works are known as the Cefn Works, and comprise the Cefn Cwac and Park Tye Gunter iron-works and collieries. The iron-works consist of three blast-furnaces for the manufacture of pig-iron, with the necessary adjuncts of a blast-furnace and hot air stoves, casting houses, refinery and rollers. The collieries have access to a very considerable tract of coal and iron ore, occupying, in seams averaging in thickness from 4 to 30 feet, more than a thousand acres of land. The quantity of coal and iron ore yet to be wrought is estimated at a very large amount—1 from 50,000,000 to 100,000,000 tons. The property is held by the bank as assignees to leases for long terms from several landed proprietors.

TELEGRAPHIC COMMUNICATION WITH AMERICA.—Arrangements are now being made for the formation of a company to lay down across the Atlantic a line of telegraphic communication upon the principles patented by Mr. Thomas Allan, of Edinburgh. This new rope differs entirely from all other submarine ropes, combining considerably increased conductivity with such a diminution in weight, that the entire cable to connect England with America may be conveniently carried in one vessel. Its strength likewise bears a much greater proportion to its weight than the case with ropes of a common construction, the excessive weight of which makes the carriage of them impracticable, while, besides their deficiency in conducting power for so great a distance, their peculiar construction renders them self-destructive on being submerged to great depths. The cost of construction and risk in laying down such a line of telegraphic communication would, therefore, be small when compared with the expense and risk under the ordinary systems. Mr. Allan's system thus brings the experience of the electrical communication with America within reasonable compass, as a rope on his principle can be laid down at a cost not exceeding 200,000s.

ENTERTAINMENT TO PROFESSOR MORSE.—On Thursday, a public dinner was given at the Albion Tavern, to Professor Morse, of the United States, in acknowledgment of his services in the development of the electric telegraph; likewise with a view of expressing the opinion of the importance of a submarine communication with America. The chair was occupied by Mr. W. Forthright Cooke, one of the directors of the Electric Company, who was supported by Lord Charles Clinton, Sir James Carmichael and Charles Fox, General Wyld, Dr. O'Shaughnessy, Messrs. Rowland Hill, Cyrus Field, J. W. Brett, T. Crampson, Carpentier, and others. In the course of the evening, in proposing the health of Professor Morse, the chairman stated his opinion was, that the system introduced by the Professor was the best, it being the most simple, permanent, and certain. The healths of Mr. Brett, the inventor of the wire rope for submarine telegraphs; Mr. Crampson, who first carried the cable to Calais; Sir Charles Fox, and several other eminent persons, were drunk, and suitably responded to, as well as one to the Telegraph Companies of England.

PROPOSED BANQUET TO MR. INGRAM, M.P.—The preparations for this mark of respect from the people of Boston towards their representative are carried forward in a spirit of cordiality, which seems to point out Mr. Ingram as pre-eminent among the Members for Boston, and promises that the public dinner will, indeed, be a popular one. The banquet will be held in the Corn Exchange in about a fortnight, but the exact day has not been fixed upon. On this point the opinion of the Boston Member, as well as of the friends who are expected to accompany him from London, will, of course, have to be studied. On Thursday evening last, a meeting of the managing committee was held, at which some of the most important preliminary arrangements were forwarded.

DEATH OF MR. JOHN PAUL.—We regret to announce the untimely death, at 27 years of age, of Mr. John Paul, mining engineer, and recently appointed manager of the Fort Bowen Gold and Silver Mines, near Chagres, in Central America. The deceased was a son of the late Mr. Paul, of Tavistock, a gentleman well known as a tin smelter and mining engineer, and as the discoverer and originator of many good mines in the Tavistock district, and, like his father, stood high in the estimation of the mining world and in his profession. He possessed a remarkable love of adventure, enterprise, and energy, to an extraordinary degree, and the incidents of his life are near akin to romance. At 19 years of age, after making himself familiar with the mining districts of this country, he went to Australia, where he successfully carried on gold mining, from which he made considerable profits, and after an absence of five years he returned home. Shortly afterwards he went again to Australia to undertake an engagement with the Colonial Gold Company, and after it terminated he returned to his home in Devonshire. In the year 1854, he was, in a fever, terminated fatally on Sept. 7 last in an open boat off Colon, at the cemetery of which place his remains were interred.

DEATH OF MR. FRANCIS WISHAW, C.E.—It is with deep regret we have to record the demise of Mr. Francis Wishaw, the eminent engineer, who expired suddenly, on the 6th inst., in the 52d year of his age. Mr. Wishaw was the author of the first practical work on railways; and it was mainly owing to his exertions, while secretary, that the Society of Arts was reconstituted in its previously languishing condition. With him, likewise, emanated the first idea of the Great Exhibition of 1851, his plans of which were laid before Prince Albert, and approved by his Royal Highness. Mr. Wishaw was also instrumental in maturing the artistic arrangements of the Crystal Palace, at Sydenham; and several valuable contributions to this Journal were written by him. In the domestic and social life, and the associations of business, the lamented deceased was greatly esteemed by all who knew him, and his loss will be sincerely felt and deplored.

LITERARY NOTICE.

Practical Remarks on the Present State of the Law of Patents, addressed to Inventors. Second edition, 8vo. By WILLIAM SPENCE, Assoc. Inst. C.E. London: Stevens and Norton; and J. Walsle, 59, High Holborn.

This pamphlet is just the thing to put into the hands of an intending patentee who does not seek to become his own patent agent, but desires such a sufficient knowledge of the subject as will enable him to take care that his business is properly attended to. Mr. Spence shows, indeed, that no one is compelled, either by positive enactment or complicated practice, to have professional aid; he, however, very appropriately remarks,—"But experience has shown that it is well for inventors to pause before they venture to depend upon their own unaided skill in drawing their titles and specifications. The provisional specification is a document which bears an important relation both to the title of the patent, and to the complete specification afterwards to be filed. And if it be at length found that the two documents (the provisional and complete specifications) are not in accordance one with the other, the patent cannot be supported. Every title of a patent must contain only one substantive invention. Every provisional specification must state distinctly and intelligibly the whole nature of the invention, so that the law officer may be apprised of the improvement, and of the means by which it is to be carried into effect;" and every complete, or final, specification must "particularly describe and ascertain the nature of the invention, and in what manner the same is to be performed."

It is thus required that the provisional specification should indicate the essential character of the invention, as distinguished from its accidents; and the final specification must take up this more abstract representation of the invention, and show its reality in a more concrete form, without cramping the legitimate scope of the invention as originally stated. And there is no doubt this supposes in the person who is competent to draw these documents a capacity for understanding scientific propositions, and for taking a cool and dispassionate view of their application in each case in the first instance.

Mr. Spence then refers to his work on "Patentable Invention and Scientific Evidence," where he has most logically discussed the question—What is Patentable Invention? and shows how much the solution of this problem depends upon the scientific evidence now allowed in patent lawsuits. As to which we may remark, that we consider the uncertainty of our patent law to be chiefly owing to the present practice, by which plaintiff and defendant respectively pit against each other their own civil engineers, knowing little of civility and less of engineering; chemists, who seldom use their laboratory; and manufacturers, who never manufactured anything but evidence.

VENTILATION.—Mr. McKinnell, secretary of the Glasgow Athenaeum, has invented a simple and ingenious contrivance for ventilating dwellings, churches, &c., which consists of two tubes, one within the other, the inner one with a broad flange on its lower end, spreading like the bell of a trumpet, within the room. This inner tube opens to the outer air, and is meant to allow the escape of the foul air heated up within which apartment becomes filled when long occupied with human beings, and the outer tube, which should be no fire, stove, or other artificial method of heating and contaminating the atmosphere. Over this tube there is placed a hood, or contrivance to prevent the admission of rain. This tube would be sufficient to allow all the foul air of a room to escape, and if doors and windows were kept open there would be a constant supply of pure air. But drafts have to be avoided in any efficient scheme of ventilation, otherwise the cure would be as bad as the complaint. Cramps, ear-aches, and other ills would be sure to seize the dwellers in a room in which the air was kept up between doors and windows and the inner tube, while the hood, which has been so corrupt and unwholesome. Attached to the outer tube—that which envelops, so to speak, the escape tube—he has an arm or arms which pass at right angles, or by any other convenient direction, to the outer air, and while the inner tube is causing an upward and outward current, these arms lead the exterior and pure air into the concentric opening formed between the two tubes, where there is a constant downward and inward current. The flange we have mentioned spreads the air in a thin film across the ceiling of the apartment, whence it falls, in consequence of its greater gravity, in the form of a shower, which rain down through the body of air in the chamber. Acting upon the discoveries of Dr. Stenhouse, the inventor proposes to attach to the supply tubes of his ventilator a thin sieve of erudely broken charcoal, through which the atmospheric air will pass in its way to the room—the charcoal acting as a deodoriser and detergent. Mr. McKinnell is at present occupied with another invention, which he anticipates will be a cheap and efficient plan of heating large or small apartments. We shall shortly be in a position to give ample details upon this invention also.

RAISING MUD AND SOIL FROM BOTTOMS OF RIVERS.—M. Louis Schwartzkopf, of Berlin, proposes to accomplish this object by means of a centrifugal or rotary pump, fixed on board a vessel, with a steam-engine for working it. The pump descends a suction pipe, arranged suitably, so that its head can be moved to and fro. The lower end of the suction pipe is fitted with a head, or instrument, which may be so constructed, that, on being moved with the lower end of the pipe, the mud, with its some of the water will be drawn up by the pump, from whence it can be discharged on a bank, or into a barge or any other vessel convenient for the purpose.

GOLD AND SILVER AMALGAMATING MACHINE.—Messrs. Symonds, Fell, and Co., of Millwall, have their new patented machine in daily operation at their works; and on Thursday a number of gentlemen attended to witness the operation, and appeared much pleased with the effective manner in which it produced gold. A have been working about 20 tons a day of poor Welsh stuff, and it produced gold, and a large quantity of the tailings of the Chanceryville ore have been operated on, and 10s. worth of gold extracted, being at the rate of about ½ oz. to the ton. The machine is well worthy of inspection by those interested in gold mining.

THE BRYN MALLY COLLIERY—FATAL ACCIDENT.—Since the accident which occurred last week, every effort has been made for the recovery of the bodies of the missing workmen. For two or three days, while the water was being raised by means of the pump only, the quantity rather increased than diminished, but since the "cage" (the machinery for ascending and descending) has been fitted up, the purpose of clearing the mine it diminishes at the rate of about 20 tons an hour. That some of them may be found there, as if they managed to get to it when the alarm was given they may have been able to sustain life for some days by eating the ponies used in the mine. The accident is supposed to have been caused by the accumulation of water in an adjoining mine, which had not been worked for the last 30 years. The Bryn Mally Colliery is worked by Messrs. Clayton and Darlington (a well-known firm in connection with the coal trade of Lancashire), and is one of the most productive in North Wales. About 200 men were engaged at the various levels of the mine, and a large quantity of the tailings of the Chanceryville ore have been operated on, and 10s. worth of gold extracted, being at the rate of about ½ oz. to the ton. The machine is well worthy of inspection by those interested in gold mining.

ANOTHER FATAL CASUALTY AT BRYN MALLY MINE.—Upon revisiting the scene of the late fatal accident at Bryn Mally Mine, on Thursday morning, we found a large crowd, and the same anxious expression told the spectator at a glance that the water in the workings had not been sufficiently reduced to allow of a descent in quest of their missing comrades. The cage was still lifting out immense volumes of water at every stroke, but the engine which is ordinarily used for keeping the mine dry, was idle in consequence of a lamentable accident which occurred last evening. About 8 o'clock, the chief engineer, Robert Kenrick, had descended the pumping-shaft a short distance to change the buckets, and was engaged in that duty when suddenly the capstan chain broke, and with some other gearing fell upon him, knocked him off the barrel or platform on which he was standing, and precipitated him to his residence of the shaft. His body was not seen until some evening, and could not be raised to the surface, where it now lies waiting the coroner's inquisition. The unfortunate man was about 40 years of age, and has left a widow and four children to deplore their loss. Ever since the inundation of the mine, the pump to which he was attending had been worked at a great pressure, making some 12 strokes a minute, and raising 60 gallons of water per stroke. The wear of the buckets must have been very great, and necessitated their being replaced, but there was no reason to believe that any other part of the machinery had been weakened by the extraordinary service demanded of it.

ACTION FOR WAGES—JOHNSON V. PEARSE.—The plaintiff brought an action in the Stokely County Court for salary for 11 weeks that he had been out of employment, at 2s. per week, house rent to May 13, and coals for a similar period. It appeared that the plaintiff was engaged in April, 1855, by Mr. Pearse, the manager of the Stokely Colliery, to work at a house at the mines, or find his own at Guisborough. Mr. John Forster stated that three months' notice was the rule of the colliery, as between the master and under-viewer, engagements of this sort were common; the under-viewer received 100s. per annum, to be paid 2s. per week, fortnightly, and in such case three months' notice is the custom. Where the engagement was for a year, one pay (where there were three fortnightly pays in one month) was slipped. The plaintiff was recalled, and stated that no pay had been slipped, but he had received his 2s. per week regularly ever since fortnight. The verdict for the defendant was 100s., with costs, which the judge has briefly gone over the evidence, and stated that the amount paid into court as plaintiff's wages, and for his coals, equalled all that was due to him, and that the amount paid in as house rent fully equalled the amount due to him on that account.

COAL MINING IN SOUTH WALES.—In Cwm Rhonda, in addition to the new colliery at Penryn, there is another opened, by Mr. R. Lewis, at Middle Cymmer level; and a pit at Cynllyndu, by Mr. Wayne, of Gullys. The Ynysrheddydd, and adjoining properties of Mr. Crawshaw Bailey, with reports of his mining agents thereon, but we have yet to learn whether the project is fully matured. At Gwynn, near Castell Valley, a London firm are opening on Mr. Powell's lower Lantwit seam, and another at Fynyedoc Lane, which with Penryn, &c., the management of Mr. Brooker Smith, C.E. Messrs. James and Co. are progressing fast with their works on No. 3 seam, at Bodrhyngyl. —*Star and Gwent.*

DISCOVERY OF SLATE VEINS.—Several veins of slate stone, equal to the Carnarvon, have been discovered at Connaught, Myrdin, and a limited liability company, consisting of Mr. R. C. Jones, M.P., Mr. Hugh Williams, and Mr. John Williams, has been formed for the purpose of working the quarries. —*Sheffield Herald.*

THE BESSEMER PROCESS.—The railway bar rolled at Dowlais Iron-works, apparently bore a fine and even surface, but, from its steady or crystalline character, would not stand the several tests to which the modern iron (because more fibrous) iron is subjected,—that is, the abrupt pressure of the squeezer, worked on an eccentric shaft, or the sudden heavy fall of a ponderous sledge or ram. The prevalent opinion is that, with iron produced from commixture of native ore with the various oxides and hydrated-oxides of iron with cinder extensively used in South Wales, so good a specimen could not have been rolled; and that if refining is done away with by the pneumatic process, the puddling cannot. As this seems to be the desideratum, we augur it may, for well do we remember the repugnance of many to the innovation of hot blast and coke, instead of cold blast and coke, and the many unfulfilled prophecies of ruin therefrom. —*Star and Gwent.*

NEW STEAMERS FOR CHILI.—Don Carlos Williams, admiral of Chile, has been for some time engaged, on the part of his Government, in making arrangements relative to some machinery which is being manufactured in Glasgow for a new line of Government steamers, intended to ply between Valparaiso and Punta Arenas, and superintending the building of a number of steamers in London. —*Man. Guardian.*

of health.—Sold by all medicine vendors; and at Prof. Holloway's establishments 244, Strand, London, and 80, Maiden-lane, New York; by A. Stampa, Constantinople; A. Guidicy, Smyrna; and E. Muir, Malta.

MINES.					Transactions on the Stock Exchange.				
Shares.	Paid.	Clos. Pr.	Bus. Dow.		Shares.	Paid.	Clos. Pr.	Bus. Dow.	
160000 Anglo-Californian	3	—	—	—	6000 London and Paris	30	—	—	—
20000 Australian	1	—	—	—	60000 London Joint-Stock	19	—	—	—
80000 Clarendon Consols	3	3 1/4	1 1/4	—	50000 London and Westminster ..	20	—	—	—
3500000 Copper Miners of England Stock	3	—	—	—	10000 National Provincial of Eng. 35	—	—	—	—
12000 Ditto, Pref., 7 1/2 per cent. 25	—	26 28	—	34	20000 New South Wales	20	44 40	—	—
250000 Fortuna	2	1 1/2	1 1/2	1 1/2	33873 Oriental Bank Corporation 25	—	37 38 1/2	—	—
100000 Great Nugget Vein	1	—	—	—	20000 Provincial of Ireland	25	—	—	—
51836 Grand Duchy of Baden ..	1	—	—	—	12000 South Australia	37 1/2	34 36	—	—
09000 Liberty	1	—	—	—	32000 Union of Australia	25	65 67	—	—
108315 Mariquita	1	—	—	—	60000 Union of London	—	—	—	—
50000 National Brazilian	30	3 1/4	3 1/4	3 1/4	3000 Unity Mutual	50	—	—	—
60000 New Granada	1	—	—	—					
200000 Nouveau Monde	1	—	—	—	MISCELLANEOUS.				
100000 Port Phillip	1	—	—	—	200000 Crystal Palace	5	1 1/2	2	—
50000 South Australian	1	—	—	—	30000 Ditto (Preference)	5	5 5 1/2	—	—
70000 Waller	1	—	—	—	60000 Eastern Steam	15 1/2	—	—	—
100000 West Mariposa	1	—	—	—	700000 Electric Telegraph	100	—	—	—
					10000 English and Australian Coal	—	1 1 1/2	—	—
					50000 General Screw Steam	18	12 13 1/2	—	—
					200000 London General Omnibus ..	4	3 1/2	3 1/2	—
					10000 Magdalena Steam	10	—	—	—
					30000 Mediterranean Elect. Teleg. 10	—	8 10	—	—
					40000 National Discount	5	5 5 1/2	5 1/2	—
					40000 Ditto, New	1	1 1/2	1 1/2	—
					50000 National Patent Steam Fuel	17 1/2	15 16 1/2	—	—
					20000 North of Europe Steam	1	1 1/2	1 1/2	—
					50000 Oriental Gas	1	2 1/2	2 1/2	—
					12000 Peel River Land and Mining 5	—	68 70	—	—
					30000 Penin. and Oriental Steam 50	—	71 73	—	—
					18480 Royal Mail Steam	25	34 36	—	—
					14200 South Australian Land	1	1 1/2	1 1/2	—
					100000 Scottish Australian Invest. 1	—	—	—	—